Greening the Covenant: Integrating Environmental Considerations in the Interpretation of States Parties' Obligations under Article 2(1) of the International Covenant on Economic Social and Cultural Rights

by

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Summary

The realisation of economic, social and cultural rights is inextricably linked to the condition of the environment. The rights in the International Covenant on Economic, Social and Cultural Rights ("the Covenant") are increasingly threatened by environmental degradation and climate change. The UN Committee on Economic, Social and Cultural Rights ("the Committee") has recognised the relationship between the environment and Covenant rights. However, the Committee has not yet developed a systematic approach to integrating the environment within its supervisory mandate.

The integration of environmental considerations within the scope of the Covenant through interpretation (or "greening" the Covenant) must follow the rules applicable to the interpretation of human rights treaties. A teleological interpretation of human rights treaties demands that the object and purpose of the treaty be given practical effect in the lives of individual rights-holders. The evolutive approach to interpretation emphasises that human rights treaties are living instruments that must evolve according to changing circumstances. In order to evolve appropriately and be effective in realising Covenant rights, it is critical that the interpretation of the Covenant takes the threats posed by climate change and environmental degradation into account.

To guide this greening of the Covenant, the dissertation draws on established principles of international environmental law. These principles include: sustainable development; the no-harm principle; the principle of prevention; the precautionary principle; the polluter pays principle; and the principle of common but differentiated responsibilities. The principles demonstrate recognised approaches to environmental challenges under international environmental law and are a valuable source of insight for greening the Covenant.

The dissertation focuses on the interpretation of key aspects of State Parties' obligations under article 2(1), namely: maximum available resources; core obligations; progressive realisation; and non-retrogression. Given its central role in the Covenant, the interpretation of article 2(1) has relevance for all Covenant rights. Focusing on key aspects of article 2(1) thus facilitates a substantive and systematic integration of environmental considerations within all Covenant rights.

A number of significant contributions are made by the dissertation with regard to the proposed greening of article 2(1). First, the dissertation argues that maximum available resources should be understood from a qualitative perspective, particularly in relation to natural resources and their inherent contribution to the enjoyment of Covenant rights.

Secondly, it proposes the establishment and protection of the baseline environmental conditions necessary for the enjoyment of the core of economic, social and cultural rights. Thirdly, the dissertation argues that measures towards the progressive realisation of Covenant rights must be environmentally sustainable in order to prevent future retrogression. Finally, it is argued that the interpretation of the full realisation or ceiling of Covenant rights must be defined according to planetary boundaries and environmental limits.

This greening of article 2(1) aids in protecting Covenant rights from the threats of environmental degradation, and supports the protection of the environment on which those rights depend. Through greening States Parties' obligations, the dissertation offers an interpretation of the Covenant that would ensure its relevance and responsiveness to the urgent and existential environmental challenges confronting humanity.

Opsomming

Die verwesenliking van ekonomiese, sosiale en kulturele regte hou onlosmaaklik verband met die toestand van die omgewing. Die regte in die Internasionale Verdrag oor Ekonomiese, Sosiale en Kulturele Regte ("die Verdrag") word toenemend bedreig deur die agteruitgang van die omgewing, veral deur klimaatsverandering. Die Verenigde Nasie Komitee vir Ekonomiese, Sosiale en Kulturele Regte ("die Komitee") erken die verhouding tussen omgewing en Verdragsregte. Die Komitee het egter nog nie 'n stelselmatige benadering ontwikkel om die omgewing binne sy toesighoudende mandaat te integreer nie.

Die integrasie van omgewingsoorwegings binne die bestek van die Verdrag deur interpretasie (of "vergroening" van die Verdrag) moet noodwendig die reëls volg wat van toepassing is op die interpretasie van menseregteverdragte. 'n Teleologiese interpretasie vereis dat die doel van die verdrag prakties in die lewens van individuele regtehouers toegepas word. Die evolutiewe benadering beklemtoon dat menseregteverdrae lewendige instrumente is wat by veranderende omstandighede moet aanpas. Om toepaslik te ontwikkel en om effektief Verdragsregte te verwesenlik, is dit van kritieke belang dat die interpretasie van die Verdrag die bedreigings wat klimaatsverandering en die agteruitgang van die omgewing inhou, in ag neem.

Om hierdie vergroening van die Verdrag te rig, berus die proefskrif op gevestigde beginsels van internasionale omgewingsreg, insluitend: volhoubare ontwikkeling; die geen-skade-beginsel; die beginsel van voorkoming; die voorsorgbeginsel; die beginsel van die besoedelaar betaal; en die beginsel van gemeenskaplike, maar gedifferensieerde

verantwoordelikhede. Die beginsels toon erkende benaderings tot omgewingsuitdagings ingevolge die internasionale omgewingsreg en is 'n waardevolle bron van insig om die Verdrag te vergroen.

Die proefskrif fokus op die interpretasie van sleutelaspekte van die partye se verpligtinge ingevolge artikel 2(1), naamlik: maksimum beskikbare bronne; kernverpligtinge; progressiewe besef; en nie-retrogressie. Gegewe die sentrale rol van artikel 2(1) in die Verdrag, is die interpretasie daarvan van toepassing op alle Verdragsregte. Die fokus op sleutelaspekte van artikel 2(1) vergemaklik dus 'n substantiewe en stelselmatige integrasie van omgewingsoorwegings binne alle Verdragsregte.

'n Aantal belangrike bydraes word gelewer deur die proefskrif met betrekking tot die voorgestelde vergroening van artikel 2(1). Eerstens voer die proefskrif aan dat die maksimum beskikbare hulpbronne vanuit 'n kwalitatiewe perspektief verstaan moet word, veral in verband met natuurlike hulpbronne en hul inherente bydrae tot die genieting van Verdragsregte. Tweedens stel dit voor dat die basiese omgewingstoestande, wat nodig is om die kern van ekonomiese, sosiale en kulturele regte te geniet, ingestel en beskerm word. Dit is. Derdens voer die proefskrif aan dat maatreëls vir die progressiewe verwesenliking van Verdragsregte omgewingsvolhoubaar moet wees om toekomstige retrogressie te voorkom. Ten slotte word daar aangevoer dat die interpretasie van die volle verwesenliking van Verdragsregte gedefinieer moet word volgens planetêre grense en omgewingsperke.

Die vergroening van artikel 2(1) help om die Verdragsregte te beskerm teen die bedreigings wat daargestel word deur die omgewing se agteruitgang, en ondersteun verder die beskerming van die omgewing waarvan daardie regte afhanklik is. Deur middel van vergroening van die verpligtinge op state, bied die proefskrif 'n interpretasie wat die relevansie van die Verdrag sou verseker in die lig van die dringende en eksistensiële omgewingsuitdagings wat die mensdom konfronteer.

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TABLE OF CONTENTS

DETAILED TABLE OF CONTENTS

List of Abbreviations

ACHPR	African Commission on Human and Peoples' Rights
CBD	Convention on Biological Diversity
CBDR	Common but differentiated responsibilities
CEDAW	Convention on the Elimination of all Forms of Discrimination Against Women
CESCR	UN Committee on Economic, Social and Cultural Rights
CFCs	Chlorofluorocarbons
CMW	UN Committee on the Protection of the Rights of All Migrant Workers and Members of their Families
CPRD	UN Committee on the Rights of Persons with Disabilities
CRC	UN Committee on the Rights of the Child
ECHR	European Convention on Human Rights
ECJ	European Court of Justice
ECOSOC	UN Economic and Social Council
ECtHR	European Court of Human Rights
EIA	Environmental impact assessment
ESCRs	Economic, social and cultural rights
EU	European Union
FPIC	Free, prior and informed consent
GHGs	Greenhouse gases
GEO-5	Fifth UNEP Global Environment Outlook
GEO-6	Sixth UNEP Global Environment Outlook
HR	Human rights
HRC	UN Human Rights Committee
HRIA	Human rights impact assessment
IACHR	Inter-American Commission on Human Rights

IACtHR	Inter-American Court on Human Rights
ICCPR	International Covenant on Civil and Political Rights
ICERD	International Convention on the Elimination of All Forms of Racial Discrimination
ICESCR	International Covenant on Economic, Social and Cultural Rights
ICJ	International Court of Justice
IEL	International environmental law
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPCC	Intergovernmental Panel on Climate Change
ITLOS	International Tribunal for the Law of the Sea
IUCN	International Union for Conservation of Nature and Natural Resources
OECD	Organisation for Economic Co-operation and Development
OHCHR	Office of the High Commissioner for Human Rights
REDD	Reducing Emissions from Deforestation and Forest Degradation
SDGs	Sustainable Development Goals
SEA	Strategic environmental assessment
TFEU	Treaty on the Functioning of the European Union
UN	United Nations
UNCLOS	UN Convention on the Law of the Sea
UNDP	UN Development Programme
UNDRIP	UN Declaration on the Rights of Indigenous Peoples
UNDROP	UN Declaration on the Rights of Peasants and Other People Working in Rural Areas
UNEP	UN Environment Programme
UNFCCC	UN Framework Convention on Climate Change
UNHRC	UN Human Rights Council

UNGA	UN General Assembly
VCLT	Vienna Convention on the Law of Treaties
WCED	World Commission on Environment and Development
WMO	World Meteorological Organization
WSSD	World Summit on Sustainable Development
WTO	World Trade Organization

CHAPTER 1: INTRODUCTION

1 1 Background

The well-being and survival of humankind is inextricably connected to, and dependent on, the environment. Despite this reality, the environment and the life-supporting services it provides are subject to numerous threats largely driven by human activity. Scientific evidence shows that "atmospheric, geological, hydrological, biological and other Earth System processes are being altered by human activity",[1] and there is a "rapid decline" in ecosystems and biodiversity.[2] In relation to the impact of climate change, the Intergovernmental Panel on Climate Change ("IPCC") has highlighted significant changes to hydrological systems; patterns and behaviours of terrestrial, freshwater and marine species; and crop yields.[3]

The interdependence of humans and the environment has been underscored by the COVID-19 pandemic. Experts have recognised that pandemics are often caused by human activity and related impacts on the environment.[4] The anthropogenic drivers of zoonotic diseases include "[u]nsustainable exploitation of the environment due to land-use change, agricultural expansion and intensification, wildlife trade and consumption" as well as biodiversity loss.[5] Addressing the challenges related to the interface of humans and the environment is essential for the prevention of future pandemics.[6] It is thus undeniable that

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[1] UNEP *Global Environment Outlook 5: Environment for the Future We Want* (2012) xviii.

[2] IPBES "Summary for policymakers" in S Díaz, J Settele, ES Brondízio, HT Ngo, M Guèze, J Agard, A Arneth, P Balvanera, KA Brauman, SHM Butchart, KMA Chan, LA Garibaldi, K Ichii, J Liu, SM Subramanian, GF Midgley, P Miloslavich, Z Molnár, D Obura, A Pfaff, S Polasky, A Purvis, J Razzaque, B Reyers, R Roy Chowdhury, YJ Shin, IJ Visseren-Hamakers, KJ Willis & CN Zayas (eds) *Global Assessment Report on Biodiversity and Ecosystem Services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services* (2019) 11. See also UNEP *Global Environment Outlook 6: Summary for Policymakers* (2019) 8; UNEP *Global Environment Outlook 6: Healthy Planet, Healthy People* (2019) 153-154.

[3] IPCC *Climate Change 2014: Synthesis Report, Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (2014) 6. See also O Hoegh-Guldberg, D Jacob, M Taylor, M Bindi, S Brown, I Camilloni, A Diedhiou, R Djalante, K Ebi, F Engelbrecht, J Guiot, Y Hijioka, S Mehrotra, A Payne, S Seneviratne, A Thomas, R Warren & G Zhou "Impacts of 1.5ºC Global Warming on Natural and Human Systems" in V Masson-Delmotte, P Zhai, H Pörtner, D Roberts, J Skea, P Shukla, A Pirani, W Moufouma-Okia, C Péan, R Pidcock, S Connors, J Matthews, Y Chen, X Zhou, M Gomis, E Lonnoy, T Maycock, M Tignor & T Waterfield (eds) *Global Warming of 1.5°C: An IPCC Special Report on the Impacts of Global Warming of 1.5°C above Pre-Industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty* (2018).

[4] IPBES "Executive Summary" in P Daszak, C das Neves, J Amuasi, D Hayman, T Kuiken, B Roche, C Zambrana-Torrelio, P Buss, H Dundarova, Y Feferholtz, G Foldvari, E Igbinosa, S Junglen, Q Liu, G Suzan, M Uhart, C Wannous, K Woolaston, P Mosig Reidl, K O'Brien, U Pascual, P Stoett, H Li, HT Ngo (eds) *Workshop Report on Biodiversity and Pandemics of the Intergovernmental Platform on Biodiversity and Ecosystem Services* (2020) 5. See also UNEP & International Livestock Research Institute *Preventing the Next Pandemic: Zoonotic Diseases and How to Break the Chain of Transmission* (2020) 7, 9 & 15-19.

[5] IPBES "Executive Summary" in *Workshop Report on Biodiversity and Pandemics of the IPBES* (2020) 5-9.

[6] IPBES "Executive Summary" in *Workshop Report on Biodiversity and Pandemics of the IPBES* (2020) 5-9. See, generally, UNEP & International Livestock Research Institute *Preventing the Next Pandemic: Zoonotic*

our future (and our ability to realise human rights) will be determined by our relationship to the environment.

The unprecedented human impact on the earth has led to the onset of a new geological epoch which scientists have termed the Anthropocene.[7] Kim and Bosselmann note that the conditions of this epoch "are very likely to be catastrophic for the resilience of human societies and economies".[8] Human-induced changes to the environment include rising global temperatures;[9] rising sea levels; increased emission of greenhouse gases ("GHGs"); and changes in land use for agriculture and urbanisation, including deforestation.[10]

Without the essential elements for human survival, we cannot fully realise human rights. Weeramantry J of the International Court of Justice ("ICJ"), in a separate opinion in *Gabčikovo-Nagymaros Project (Hungary/Slovakia)*,[11] has noted that protection of the environment is:

> "[A] vital part of contemporary human rights doctrine, for it is a *sine qua non* for numerous human rights such as the right to health and the right to life itself. It is scarcely necessary to elaborate on this, as damage to the environment can impair and undermine all the human rights spoken of in the Universal Declaration and other human rights instruments".[12]

A healthy environment is indispensable for human rights. Civil and political rights, as well as economic, social and cultural rights depend on a healthy environment for their full realisation. In relation to the threat of climate change to human rights, Atapattu argues that to state that "climate change has the potential to undermine the enjoyment of many protected rights, if not all, is an understatement".[13]

The former Independent Expert on the Issue of Human Rights Obligations relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment, John Knox, noted that the UN Human Rights Council ("UNHRC") has on a number of occasions identified

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Diseases and How to Break the Chain of Transmission (2020); UN Food and Agriculture Organization *The COVID-19 Challenge: Zoonotic Diseases and Wildlife: Collaborative Partnership on Sustainable Wildlife Management's Four Guiding Principles to Reduce Risk from Zoonotic Diseases and Build More Collaborative Approaches in Human Health and Wildlife Management* (2020).

[7] UNEP *Global Environment Outlook 5: Environment for the Future We Want* (2012) xviii.

[8] RE Kim & K Bosselmann "Operationalizing Sustainable Development: Ecological Integrity as a *Grundnorm* of International Law" (2015) 24 *RECIEL* 194 195. See 207 where Kim and Bosselmann point out rather chillingly that "due to the complex nature of Earth's social–ecological system, the changes will not be incremental but will likely be abrupt, involving a societal collapse".

[9] In 2014 the IPCC noted, for example, that "[e]ach of the last three decades has been successively warmer at the Earth's surface than any preceding decade since 1850". IPCC *Climate Change 2014: Synthesis Report* (2014) 2. See also UNEP *Global Environment Outlook 6: Healthy Planet, Healthy People* (2019) 47.

[10] UNEP *GEO5: Environment for the Future We Want* xviii. See also See UNEP *GEO-6: Healthy Planet, Healthy People* 162.

[11] *Gabčikovo-Nagymaros Project (Hungary/Slovakia)*, Judgment, ICJ Reports (1997) 7 ('*Gabčikovo-Nagymaros')*.

[12] *Gabčikovo-Nagymaros* (Separate Opinion of Vice–President Weeramantry) 4.

[13] S Atapattu *Human Rights Approaches to Climate Change* (2016) 68.

environmental threats to human rights including the threat of hazardous wastes to the rights to life and health; the threat of climate change to the rights to life, health, food, water, housing and self-determination; and the threats of environmental degradation, desertification and climate change to the right to food.[14] In his final report in 2019 the former Special Rapporteur on Extreme Poverty and Human Rights, Philip Alston underscored the dangers associated with climate change:

> "Climate change threatens truly catastrophic consequences across much of the globe and the human rights of vast numbers of people will be among the casualties. By far the greatest burden will fall on those in poverty, but they will by no means be the only victims. To date, most human rights bodies have barely begun to grapple with what climate change portends for human rights. However, as a full-blown crisis bears down on the world, business as usual is a response that invites disaster".[15]

There is no doubt that environmental degradation, and climate change in particular, poses an immense and critical threat to the realisation of all human rights. Addressing these challenges requires an evolution in the interpretation of human rights norms and obligations.

Environmental threats to the earth as a whole have famously been conceptualised in terms of planetary boundaries. In 2009 Johan Rockström and his colleagues proposed a framework of planetary boundaries which "define the safe operating space for humanity with respect to the Earth system" and they explain that "[i]f these thresholds are crossed, then important subsystems […] could shift into a new state, often with deleterious or potentially even disastrous consequences for humans".[16] The planetary boundaries are comprised of essential "Earth-system processes" namely climate change, rate of biodiversity loss, interference with the nitrogen and phosphorus cycles, stratospheric ozone depletion, ocean acidification, global fresh-water use, change in land use, chemical pollution and atmospheric aerosol loading.[17] Kate Raworth builds on this conceptualisation of planetary boundaries and provides a useful articulation of the relationship between human rights and planetary boundaries in her theory of doughnut economics.[18] She suggests that the "safe operating space" described by Rockström and his colleagues is the intervening space between the outer limits of planetary boundaries and the inner limits of an essential social foundation

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[14] UNHRC *Report of the Independent Expert on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment, John H. Knox: Preliminary Report* (24 December 2012) A/HRC/22/43 para 19.

[15] UNHRC *Report of the Special Rapporteur on Extreme Poverty and Human Rights: Climate Change and Poverty* (17 July 2019) A/HRC/41/39 para 1.

[16] J Rockström, W Steffen, K Noone, Å Persson, FS Chapin III, EF Lambin, TM Lenton, M Scheffer, C Folke, HJ Schnellnhuber, B Nykvist, CA De Wit, T Hughes, S Van der Leeuw, H Rodhe, S Sorlin, PK Snyder, R Costanza, U Svedin, M Falkenmark, L Karlberg, RW Corell, VJ Fabry, J Hansen, B Walker, D Liverman, K Richardson, P Crutzen, JA Foley, "A Safe Operating Space for Humanity" (2009) 461 *Nature* 472 472.

[17] 472.

[18] K Raworth *Doughnut Economics: Seven Ways to Think Like a 21st Century Economist* (2017) 44-45.

which includes human rights.[19] These inner and outer limits form two concentric circles (shaped like a doughnut) that enclose the "safe and just space" within which humanity must exist.[20] Achieving this safe and just space requires an approach to human rights that, at the very least, takes environmental considerations into account and promotes the protection of the environment on which human rights depend.

The interdependent relationship between the environment and human rights was recognised in the 1972 Declaration of the United Nations Conference on the Human Environment ("the Stockholm Declaration").[21] The Stockholm Declaration affirmed that "[b]oth aspects of man's environment, the natural and the man-made, are essential to his well-being and to the enjoyment of basic human rights – even the right to life itself".[22] As this understanding of the relationship between the environment and human rights grew, environmental rights were introduced into two binding human rights instruments: the African Charter on Human and Peoples' Rights in 1981[23] and the Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights in 1988.[24] A number of states have also incorporated environmental rights or duties into their national constitutions.[25] However, as Knox points out, the recognition of environmental rights "came too late to be codified in the major international human rights agreements" as the Universal Declaration of Human Rights was adopted in 1948, and the International Covenant on Civil and Political Rights ("ICCPR")[26] and the International Covenant on Economic, Social and Cultural Rights ("the Covenant" or "ICESCR")[27] were both adopted in 1966.[28] In the international law arena, at least for now, the question of environmental

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[19] Raworth *Doughnut Economics* 49.
[20] Raworth *Doughnut Economics* 44-45. This implies limits to development and expansion of economic growth as well as limits to the infringement of human rights due to environmental degradation.
[21] Declaration of the United Nations Conference on the Human Environment (Stockholm, June 1972) UN Doc A/CONF48/14/Rev1.
[22] Stockholm Declaration, Proclamation 1.
[23] African Charter on Human and Peoples' Rights (adopted 27 June 1981, entered into force 21 October 1986) 21 ILM 58 (1982) article 24.
[24] Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights (Protocol of San Salvador) (entered into force 16 November 1999) OAS Treaty Series No 69 (1988) article 11. See HM Osofsky "Learning from Environmental Justice: A New Model for International Environmental Rights" (2005) 24 *Stanford ELJ* 71 78.
[25] JH Knox "Human Rights, Environmental Protection, and the Sustainable Development Goals" (2015) 24 *Washington International Law Journal* 517 519; LH Leib *Human Rights and the Environment Philosophical, Theoretical, and Legal Perspectives* (2011) 1-2. For a comprehensive examination of national environmental rights globally see DR Boyd *The Environmental Rights Revolution: A Global Study of Constitutions, Human Rights and the Environment* (2012).
[26] International Covenant on Civil and Political Rights (adopted 16 December 1966, entered into force 23 March 1976) 999 UNTS 171.
[27] International Covenant on Economic, Social and Cultural Rights (adopted 16 December 1966, entered into force 3 January 1976) 993 UNTS 3.
[28] JH Knox (2015) *Wash Intl LJ* 519.

protection has not been addressed through specific environmental rights[29] (with the exception of the two regional instruments referred to above).[30] A "Global Pact for the Environment" proposed by the UN General Assembly has been drafted,[31] and a "Draft International Covenant on the Right of Human Beings to the Environment" has also been submitted to the UN Human Rights Council by the International Center for Comparative Environmental Law.[32] It is clear that pressure for the recognition of the right to a safe, clean, healthy and sustainable environment is increasing.[33] In the context of indigenous peoples, as well as in relation to peasants and other people working in rural areas, specific environmental rights have been recognised by the UN General Assembly, including the right to "the conservation and protection of the environment".[34] In the absence of a universal and distinct environmental right in international law, it is even more important to ensure that existing human rights treaties integrate environmental considerations. However, this dissertation proposes that, even when distinct environmental rights receive recognition at the international level, environmental considerations will continue to be intrinsically relevant for the realisation of Covenant rights and should therefore remain integrated within the scope of the Covenant.[35]

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[29] Environmental rights, as used in this dissertation, refers to rights of nature or the environment as well as to dedicated human rights to an environment of a certain standard.

[30] See for example JH Knox "The Global Pact for the Environment: At the Crossroads of Human Rights and the Environment" *RECIEL* 28 (2019) 40-47; JH Knox & R Pejan (eds) *The Human Right to a Healthy Environment* (2018); Atapattu *HR Approaches to Climate Change* 51-62; S Atapattu "The Right to a Healthy Life or the Right to Die Polluted? The Emergence of a Human Right to a Healthy Environment Under International Law" (2002) 16 *Tulane Environmental Law Journal* 65-126; LE Rodriguez-Rivera "Is the Human Right to Environment Recognized under International Law? It Depends on the Source" (2001) 12 *CJIELP* 1–46.

[31] UNGA *Towards a Global Pact for the Environment* (14 May 2018) A/RES/72/277; Knox *RECIEL* 28 (2019). For the text of the draft Global Pact, see International Group of Experts for the Pact "Text of the Draft Global Pact for the Environment by the IGEP" (2017) *Global Pact for the Environment* <https://globalpactenvironment.org/en/document/draft-global-pact-for-the-environment-by-the-igep/> (accessed 15-10-2020).

[32] UNHRC *Written Statement Submitted by the Centre International de Droit Comparé de l'Environnement, a Non-governmental Organization in Special Consultative Status* (15 February 2017) A/HRC/34/NGO/60.

[33] See, for example, "The Time is Now: Global Call for the UN Human Rights Council to Urgently Recognise the Right to a Safe, Clean, Healthy and Sustainable Environment" (10-09-2020) *Geneva Environment Network* <https://www.genevaenvironmentnetwork.org/wp-content/uploads/2020/09/TheTimeIsNow_Global-Call-for-the-UN-to-Recognize-the-Right-to-a-Healthy-Environment-English.pdf> (accessed 10-11-2020). See also UNHRC *Rights of the Child: Realizing the Rights of the Child through a Healthy Environment* (13 October 2020) A/HRC/RES/45/30.

[34] UNGA *United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas* (21 January 2019) A/RES/73/165 article 18; UNGA *United Nations Declaration on the Rights of Indigenous Peoples* (2 October 2007) A/RES/61/295 article 29.

[35] In the event that environmental rights receive international recognition, this position would also be consistent with the interdependence of rights which should include environmental rights if they are internationally recognised. In relation to interdependence, see UNGA *Alternative Approaches and Ways and Means Within the UN System for Improving the Effective Enjoyment of Human Rights and Fundamental Freedoms* (16 December 1977) A/RES/32/130 Article 1(a); UNGA *Indivisibility and Interdependence of Economic, Social, Cultural, Civil and Political Rights* (4 December 1986) A/RES/41/117 preamble; UNGA *Declaration on the Right to Development* (December 1986) A/RES/41/128 preamble & article 6(2). See also C Scott "The

1 2 Motivation

1 2 1 The need for greater integration of environmental considerations within ESCRs

Given the significant links between human rights and the state of the environment, it is necessary to ensure that environmental considerations are integrated into the interpretation of human rights. A number of civil and political rights are threatened by environmental degradation, including the rights to life, privacy, home and family life, and freedom of association.[36] The economic, social and cultural rights ("ESCRs") in the Covenant are also intimately connected to the environment. In particular, the realisation of the rights to housing,[37] health,[38] food[39] and water[40] are directly dependent on the environment and natural resources.[41] It is therefore vital that States Parties' measures to realise ESCRs take the environment into account in order to protect the environment on which these ESCRs so closely depend.

The integration of environmental considerations within human rights involves ensuring that environmental degradation does not "impair and undermine all the human rights spoken of in the Universal Declaration and other human rights instruments".[42] Although awareness regarding the "inherently interdependent"[43] relationship between environmental protection and human rights has increased since the Stockholm Declaration, the potential for environmental protection through human rights has not been fully explored.[44] In 2015 Knox noted, for example, that "the relevance of human rights for environmental protection, the third pillar of sustainable development, has only recently begun to receive increased attention at the United Nations".[45] Leib points out that "human rights approaches to environmental issues are gaining currency in both international and domestic law", arguing that that "[t]he human rights system offers sophisticated legal and extra-legal mechanisms

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Interdependence and Permeability of Human Rights Norms: Towards a Partial Fusion of the International Covenants on Human Rights" (1989) 27 *Osgoode Hall Law Journal* 769-878.

[36] ICCPR article 6, 17, 22 & 23.

[37] ICESCR article 11(1).

[38] ICESCR article 12.

[39] ICESCR article 11.

[40] The right to water is established by the Committee with reference to ICESCR articles 11 & 12 in General Comment No 15. See CESCR *General Comment No 15: The Right to Water (Arts. 11 and 12 of the Covenant)* (20 January 2003) E/C12/2002/11 para 2-6.

[41] UNEP *Compendium on Human Rights and the Environment: Selected International Legal Materials and Cases* (2014) 13.

[42] *Gabčikovo-Nagymaros* (Separate Opinion of Vice–President Weeramantry) para 21.

[43] UNHRC *Preliminary Report* (2012) A/HRC/22/43 para 10.

[44] Leib *Human Rights and the Environment* 1-2.

[45] JH Knox (2015) *Wash Intl LJ* 517-518.

necessary to tackle both the severe impact of human activities on the environment and the human rights implications of ecological degradation".[46]

In recent years a number of human rights have been interpreted and applied by international and regional human rights tribunals in light of relevant environmental considerations.[47] Existing rights which have found application in environmental matters in international and regional cases include the rights to life;[48] privacy, home and family life;[49] health;[50] property;[51] and freedom of association.[52]

Human rights tribunals and academic scholarship have not considered the relationship between the environment and ESCRs in the Covenant in great detail. Chuffart and Viñuales note that in relation to the environment and human rights, the emphasis has been on human rights law generally, and how it influences IEL or promotes environmental protection.[53] There has been little attention in the research to ESCRs in particular and what environmental law and environmental considerations mean for their scope and application as well as for States Parties' obligations.[54]

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[46] Leib *Human Rights and the Environment* 1-2.

[47] For examples of such cases, see DK Anton & DL Shelton *Environmental Protection and Human Rights* (2011) 436; Leib *Human Rights and the Environment* 72; JH Knox (2015) *Wash Intl LJ* 522; D McGoldrick "Sustainable Development and Human Rights: An Integrated Conception" (1996) 45 *International and Comparative Law Quarterly* 796 812-818; D Shelton "Human Rights, Environmental Rights, and the Right to Environment" (1991) 28 *SJIL* 111-116; D Shelton "Human Rights and the Environment: What Specific Environmental Rights Have Been Recognized?" (2006) 35 *Denver Journal of International Law and Policy* 129 143. Although some of the cases cited simply involve the application of the relevant rights to environmental subject matter, a number of them required a reimagination and reinterpretation of the scope of the rights in question in order to provide for the particular environment-related violation.

[48] See, for example, *Ioane Teitiota v New Zealand* Communication No 2728/2016, CCPR/C/127/D/2728/2016 (2020) HRC para 9.4-9.5 & 9.11. See, generally, Leib *Human Rights and the Environment* 72-76; Anton & Shelton *Environmental Protection and Human Rights* 436-456. Orellana M, M Kothari & S Chaudhry "Climate Change in the Work of the Committee on Economic, Social and Cultural Rights" (03-05-2010) *CIEL* <https://www.ciel.org/Publications/CESCR_CC_03May10.pdf> (accessed 04-09-2019) 14-15; McGoldrick (1996) *ICLQ* 814; Shelton (1991) *SJIL* 113-114; Shelton (2006) *DJILP* 143-146 & 148-149.

[49] Leib *Human Rights and the Environment* 76-78; Anton & Shelton *Environmental Protection and Human Rights* 487-512; Orellana et al *Climate Change in the Work of the CESCR* 13-14; McGoldrick (1996) *ICLQ* 815; Shelton (1991) *SJIL* 114-115; Shelton (2006) *DJILP* 153-158.

[50] Leib *Human Rights and the Environment* 78-80; Anton & Shelton *Environmental Protection and Human Rights* 436-456. Orellana et al *Climate Change in the Work of the CESCR* 15-16; Shelton (2006) *DJILP* 147-148.

[51] Anton & Shelton *Environmental Protection and Human Rights* 512-519. Shelton (1991) *SJIL* 114-116; Shelton (2006) *DJILP* 159.

[52] JH Knox (2015) *Wash Intl LJ* 522; Shelton (2006) *DJILP* 159.

[53] Chuffart S & JE Viñuales "From the Other Shore: Economic, Social, and Cultural Rights from an International Environmental Law Perspective" in Riedel E, G Giacca & C Golay (eds) *Economic, Social and Cultural Rights in International Law: Contemporary Issues and Challenges* (2014) 286 286.

[54] Chuffart and Viñuales argue that IEL broadens (1) the substantive scope of economic, social and cultural rights; (2) the way in which we think about them; and (3) the range of available enforcement mechanisms. See Chuffart & Viñuales "From the Other Shore" in *ESCR in International Law* 287. See also C Voigt & E Grant "Editorial: The Legitimacy of Human Rights Courts in Environmental Disputes" (2015) 6 *JHRE* 131 135 where the authors note that the environmental obligations of States Parties that correspond to environmental rights is "an issue widely overlooked in the environmental rights debate thus far".

Integrating the environment within the Covenant can support both the protection of ESCRs themselves as well as the protection of the environment. As noted in the UN Environment Programme's 2019 Global Environment Outlook:

> "Mainstreaming environmental considerations into social and economic decisions at all levels is of vital importance. […] GEO-6 shows that environmental issues are best addressed in conjunction with related economic and social issues, taking into account synergies and trade-offs between different goals and targets, including consideration of equity and gender dimensions".[55]

Measures to realise economic, social and cultural rights should therefore incorporate environmental considerations. Consistent with the balancing of economic, social and environmental dimensions central to sustainable development, the effective implementation and realisation of ESCRs requires the deliberate and comprehensive integration of environmental considerations into the decision-making and measures taken for the fulfilment of ESCRs.

1 2 2 The Committee's treatment of environmental challenges

Little attention has been paid in academic scholarship to the UN Committee on Economic, Social and Cultural Rights ("the Committee" or "CESCR") and its work in relation to the environmental dimensions of human rights.[56] Francioni has suggested that "the development of an environmental dimension in the human rights provisions of the two UN Covenants has been rather modest".[57] It should become evident from this dissertation that, certainly in recent years, the Committee's efforts in recognising the environmental dimensions of ESCRs are more than "modest". The Committee has demonstrated a clear willingness to engage with the relationship between the environment and ESCRs, although there remains significant room for the development and expansion of ESCRs to incorporate environmental concerns.

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[55] UNEP *Global Environment Outlook 6: Summary for Policymakers* (2019) 4.

[56] See Chuffart & Viñuales "From the Other Shore" in *ESCR in International Law;* S Duyck & L McKernan *States' Human Rights Obligations in the Context of Climate Change: Synthesis Note on the Concluding Observations and Recommendations on Climate Change adopted by UN Human Rights Treaty Bodies* (2018); S Jodoin & K Lofts *Economic, Social and Cultural Rights and Climate Change: A Legal Reference Guide* (2013). See also OHCHR *Mapping Human Rights Obligations relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment: Individual Report on the International Covenant on Economic, Social and Cultural Rights* (December 2013). The latter report was prepared in terms of the special procedures of the UN Human Rights Council for the Independent Expert on the Issue of Human Rights Obligations relating to the Enjoyment of a Safe, Clean, Healthy, and Sustainable Environment.

[57] Francioni (2010) *European Journal of International Law* 53. It is important to point out that in his examination of the UN Covenants Francioni refers to the communications of the UN Human Rights Committee and does not refer to the CESCR's general comments, statements or concluding observations.

References to environmental considerations can be found in the Committee's general comments, statements and concluding observations.[58] One of the Committee's first references to the environment appears in General Comment 4 where the influence of "ecological conditions" on the right to housing is recognised.[59] There was, however, no description of these ecological conditions or any explicit consideration of how these conditions interact with the right to housing. In relation to the right to food, the Committee has referred to ecological conditions as well as sustainability and future generations,[60] and General Comment 14 recognised a healthy environment as an underlying determinant of the right to health.[61] In one of its most substantive considerations of environmental factors, the Committee's General Comment 15 in relation to the right to water included obligations related to, for example, reducing contamination of water-related ecosystems; monitoring water reserves; and assessing the impacts of climate change, desertification, deforestation and biodiversity loss.[62]

The Committee's later general comments do not address environmental concerns in any detail, but some do make reference to the environment. In General Comment 24 in relation to business activities, the Committee recognises the need for due diligence and the assessment of impacts on the environment resulting from certain activities.[63] In its general comment on science, the Committee refers to the precautionary principle and notes that it requires "unacceptable harm to the public or the environment" to be diminished or avoided.[64]

While a number of the Committee's earlier statements have recognised the relationship between the Covenant and the environment and sustainable development,[65] in recent years

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[58] For helpful summary of some important aspects of the Committee's work in relation to the environment and climate change, see Duyck & McKernan *States' Human Rights Obligations in the Context of Climate Change: Synthesis Note on the Concluding Observations and Recommendations on Climate Change adopted by UN Human Rights Treaty Bodies* (2018); Jodoin & Lofts *ESCRs and Climate Change: A Legal Reference Guide* (2013). See also OHCHR *Mapping Human Rights Obligations relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment: Individual Report on the ICESCR* (December 2013).

[59] CESCR *General Comment No 4: The Right to Adequate Housing (Art 11 (1) of the Covenant)* (13 December 1991) E/1992/23 para 8.

[60] CESCR *General Comment No 12: The Right to Adequate Food (Art 11 of the Covenant)* (12 May 1999) E/C12/1999/512 para 7. See also CESCR *Statement on the World Food Crisis* (19 May 2008) E/C12/2008/1 para 2 where the Committee recognises the influence of climate change on the right to food and notes the importance of sustainable agriculture.

[61] CESCR *General Comment No 14: The Right to the Highest Attainable Standard of Health (Art 12 of the Covenant)* (11 August 2000) E/C12/2000/4 para 4.

[62] CESCR *General Comment No 15* para 28.

[63] CESCR *General Comment No 24: State Obligations under the International Covenant on Economic, Social and Cultural Rights in the Context of Business Activities* (10 August 2017) E/C12/GC/24 para 50.

[64] CESCR *General Comment No 25 on Science and Economic, Social and Cultural Rights* (Art 15(1)(b), 15(2), 15(3) and 15(4)) (7 April 2020) E/C12/GC/25 para 56.

[65] See CESCR *Statement to the Third Ministerial Conference of the World Trade Organization (Seattle, 30 November to 3 December 1999)* (26 November 1999) E/C12/1999/9 para 2; CESCR *Statement of the Committee on Economic, Social and Cultural Rights to the Commission on Sustainable Development acting*

its statements have addressed environmental concerns more explicitly.[66] In 2018 the Committee devoted a statement to climate change where, for example, it affirms that climate change is a threat to ESCRs and points out that States Parties have an obligation to prevent foreseeable harm resulting from climate change.[67] In 2019 the Committee made a statement in relation to the 2030 Agenda for Sustainable Development[68] which focuses on the 2030 Agenda's pledge to leave no one behind. The statement emphasises the needs of those most vulnerable to climate change and environmental degradation[69] and insists that measures to realise ESCRs must be sustainable "so as to ensure that the rights are secured both for present and future generations".[70]

In addition to its general comments and statements, the Committee has also regularly referred to the environment in its concluding observations on state reports, with increasing attention to climate change impacts, mitigation and adaptation.[71] The Committee's concluding observations have also emphasised: the importance of assessing the impacts of activities that may cause damage to the environment;[72] the environmental harm caused by extractive activities, with particular attention to the relationship between private actors and

as the Preparatory Committee for the World Summit on Sustainable Development (Bali, Indonesia, 27 May to 7 June 2002) (17 May 2002) E/C12/2002/13 annex VI; CESCR *Statement on the World Food Crisis* (19 May 2008) E/C12/2008/1 para 13.

[66] See CESCR *Climate Change and the International Covenant on Economic, Social and Cultural Rights* (31 October 2018) E/C12/2018/1; CESCR *The Pledge to Leave No One Behind: The International Covenant on Economic, Social and Cultural Rights and the 2030 Agenda for Sustainable Development* (5 April 2019) E/C12/2019/1; CESCR *Statement in the Context of the Rio+20 Conference on "the Green Economy in the Context of Sustainable Development and Poverty Eradication"* (4 June 2012) E/C12/2012/1.

[67] CESCR *Climate change and the ICESCR* para 5-6.

[68] UNGA *Transforming Our World: The 2030 Agenda for Sustainable Development* (21 October 2015) A/RES/70/1.

[69] CESCR *The Pledge to Leave No One Behind: The ICESCR and the 2030 Agenda* para 8.

[70] CESCR *The Pledge to Leave No One Behind: The ICESCR and the 2030 Agenda* para 12(e).

[71] See, for example, CESCR *Concluding Observations, Australia* (12 June 2009) E/C12/AUS/CO/4 para 27; CESCR *Concluding Observations, Finland* (17 December 2014) E/C12/FIN/CO/6 para 9; CESCR *Concluding Observations, Canada* (23 March 2016) E/C12/CAN/CO/6 para 53; CESCR *Concluding Observations, Australia* (11 July 2017) E/C12/AUS/CO/5 para 12; CESCR *Concluding Observations, Russian Federation* (6 October 2017) E/C12/RUS/CO/6 para 42; CESCR *Concluding Observations, Bangladesh* (18 April 2018) E/C12/BGD/CO/1 para 13; CESCR *Concluding Observations, Mauritius* (5 April 2019) E/C12/MUS/CO/5 paras 9-10. See also UNHRC *Climate Change and Poverty* (2019) A/HRC/41/39; Duyck & McKernan *States' Human Rights Obligations in the Context of Climate Change: Synthesis Note on the Concluding Observations and Recommendations on Climate Change adopted by UN Human Rights Treaty Bodies* (2018).

[72] See, for example, CESCR *Concluding Observations, Honduras* (21 May 2001) E/C12/1/Add57 paras 24 & 46; CESCR *Cambodia* (2009) paras 15-16; CESCR *Canada* (2016) para 54; CESCR *Russian Federation* (2017) para 15; CESCR *New Zealand* (2018) para 9; CESCR *Cameroon* (2019) paras 16-17; CESCR *Argentina* (2018) para 58; CESCR *Concluding Observations, Kazakhstan* (29 March 2019) E/C12/KAZ/CO/2 para 17(e).

indigenous peoples;[73] and the obligation of consultation with local and indigenous communities with respect to activities that may harm the environment and ESCRs.[74]

It is therefore evident that environmental harm has a significant effect on the enjoyment of ESCRs. The Committee clearly recognises this relationship between ESCRs and the environment. However, with the possible exception of General Comment 15, the Committee's treatment of environmental considerations is often lacking in concrete guidance for States Parties in relation to what the environmental dimensions of their obligations under the Covenant require in practice. This dissertation will argue that the principles of international environmental law ("IEL") are particularly valuable in developing an environmentally responsive interpretation of the States Parties' obligations under the Covenant.

1 2 3 The potential for principles of international environmental law to guide the integration of environmental considerations

Throughout the development of IEL, certain overarching principles have emerged from a range of multi-lateral environmental agreements, treaties and decisions of various international bodies and tribunals.[75] This dissertation will argue that these principles offer crucial guidance regarding appropriate responses and approaches to contemporary environmental challenges.[76] Some of these principles also form part of customary

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[73] See, for example, CESCR *Concluding Observations, Russian Federation* (20 May 1997) E/C12/1/Add.13 para 14; CESCR *Concluding Observations, Nigeria* (16 June 1998) E/C12/1/Add23 para 29; CESCR *Concluding Observations, Venezuela* (21 May 2001) E/C12/1/Add.56 para 12; CESCR *Finland* (2014) para 9; CESCR *Canada* (2016) para 53; CESCR *Concluding Observations, Philippines* (26 October 2016) E/C12/PHL/CO/5-6 para 13; CESCR *Australia* (2017) para 15; CESCR *Russian Federation* (2017) para 14; CESCR *Concluding Observations, Colombia* (19 October 2017) E/C12/COL/CO/6 para 15. CESCR *Concluding Observations, Mali* (6 November 2018) E/C12/MLI/CO/1 paras 43-44; CESCR *Argentina* (2018) para 18; CESCR *Concluding Observations, Ecuador* (7 June 2004) E/C12/1/Add.100 para 12.

[74] This includes free, prior and informed consent where indigenous peoples are concerned. See, for example, CESCR *Ecuador* (2004) para 35; CESCR *Concluding Observations, Mexico* (9 June 2006) E/C12/MEX/CO/4 para 10; CESCR *Cambodia* (2009) para 15; CESCR *Russian Federation* (2017) para 15; CESCR *Australia* (2017) para 16; CESCR *Philippines* (2016) para 14; CESCR *Canada* (2016) para 14. CESCR *New Zealand* (2018) para 9; CESCR *Mali* (2018) paras 43-44; CESCR *Concluding Observations, Cameroon* (25 March 2019) E/C12/CMR/CO/4 paras 16-17.

[75] These principles have been catalogued on a number of occasions. See, for example, Report of the World Commission on Environment and Development: Our Common Future (1987) A/42/427; Declaration of the United Nations Conference on the Human Environment (Stockholm, June 1972) A/CONF48/14/REV1; Rio Declaration on Environment and Development (Rio de Janeiro, June 1992) A/CONF151/26; New Delhi Declaration on the Principles of International Law Relating to Sustainable Development (August 2002) A/CONF199/8. See also E Scotford *Environmental Principles and the Evolution of Environmental Law* (2017) 72-73; L Krämer & E Orlando (eds) *Principles of Environmental Law* (2018); P Sands, J Peel, AF Aguilar & R Mackenzie *Principles of International Environmental Law* 4 ed (2018) 197-251.

[76] See Chuffart & Viñuales "From the Other Shore" in *ESCR in International Law* 307 where the authors affirm that IEL has much to offer human rights law, noting that viewing human rights from an environmental perspective "provides a number of insights which are potentially useful not only for a broader understanding of human rights and their normative context but also, and more importantly, for the continuing quest for their implementation".

international law and are therefore directly applicable to States Parties to the Covenant (unless they have persistently objected to the establishment of the relevant customary rule).[77] However, even where certain principles of IEL have acquired the status of customary international law, the application of these principles and the imposition of related environmental obligations by the Committee is not within its mandate. The Committee's mandate is determined by the content of the Covenant and can therefore only extend to environmental concerns to the extent that they impact on Covenant rights. The principles of IEL can be a useful guide in the interpretation of the Covenant and assist the Committee in designing appropriate recommendations for States Parties to address environmental challenges impacting on ESCRs.

What is required is consistent integration of environmental considerations within the obligations of States Parties as interpreted by the Committee. Integrating environmental considerations with reference to established principles of IEL would contribute to a more systematic and effective response to environmental threats to ESCRs, as well as to the harmonisation of IEL and human rights law.

In recent years the Committee has demonstrated the possibilities of drawing from principles of IEL in the interpretation of the Covenant through, for example, its references to the precautionary principle. This principle has been relied on in the context of regulating or controlling the use of harmful herbicides and pesticides,[78] as well as in the context of potential harm resulting from scientific research.[79] This illustrates the potential role of the principles of IEL in guiding the interpretation and implementation of the Covenant. It also demonstrates the Committee's is willingness to rely on these principles where they are relevant to the realisation of ESCRs. However, the challenge is to develop a more systematic approach to the integration of a wider range of IEL principles by the Committee in fulfilling its interpretive and supervisory mandate under the Covenant.

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[77] On customary international law in this context, see Sands et al *Principles of IEL* 119-125. States are not bound by customary international law if they have explicitly and persistently objected to the binding nature of the customary rule. On the persistent objector principle see Sands et al *Principles of IEL* 124; R Wallace & O Martin-Ortega *International Law* 6 ed (2009) 12.

[78] CESCR *Concluding Observations, Israel* (12 November 2019) E/C12/ISR/CO/4 para 45; CESCR *Concluding Observations, Argentina* (1 November 2018) E/C12/ARG/CO/4 para 60.

[79] CESCR *General Comment No 25 on Science and Economic, Social and Cultural Rights* (Art 15(1)(b), 15(2), 15(3) and 15(4)) (7 April 2020) E/C12/GC/25 para 56. See also paras 57 & 71.

1 3 Research problem

1 3 1 Primary research question and hypothesis

The primary research question that this dissertation seeks to answer is how the Covenant should be interpreted so as to systematically integrate environmental considerations within the interpretation of States Parties' obligations under article 2(1). The principal underlying hypothesis is that effective realisation of ESCRs and protection of the environment require an integrated interpretation of States Parties' obligations that takes environmental factors into account.

1 3 2 Supplementary research aims and hypotheses

1 3 2 1 The value of principles of IEL

The first supplementary aim of the dissertation is to identify relevant and recognised principles of IEL to guide the integration of environmental considerations in the Covenant. The underlying hypothesis is that these principles of IEL represent established and well-grounded means for addressing environmental challenges. A related hypothesis is that States Parties to the Covenant are already bound by these principles, or party to soft law declarations that recognise one or more of these principles. Appropriately relying on them to guide the interpretation of the Covenant would thus assist States Parties in understanding the nature and scope of related Covenant obligations.

1 3 2 2 Interpreting States Parties' obligations

The second supplementary aim is to investigate how States Parties' obligations under article 2(1) should be interpreted to take environmental considerations into account, with reference to the principles of IEL. The underlying hypothesis is that substantive obligations related to the environment can be identified in article 2(1) of the Covenant through a teleological interpretation that emphasises effectiveness and the evolutive approach. The central elements of the general obligations in article 2(1) that will be examined are the following: maximum available resources; core obligations; progressive realisation; and non-retrogression.

1 3 2 3 Greening States Parties' obligations

The final aim of this dissertation is to propose an interpretation of article 2(1) that appropriately incorporates environmental considerations, including through identifying some of the primary environment-related obligations that should be imposed on States Parties to the Covenant. The underlying hypothesis is that identifying obligations that relate to the

environment will provide valuable guidelines for the Committee in fulfilling its supervisory mandate, and also stimulate States Parties to take environmental considerations more seriously in fulfilling their obligations under the Covenant.

1 4 Scope of dissertation

This dissertation examines how environmental considerations can be integrated more systematically within the interpretation of States Parties' obligations under the Covenant, with the guidance of established principles of IEL. The focus on States Parties' obligations, specifically the general obligations in article 2(1) of the Covenant, means that the findings have relevance for all ESCRs in the Covenant.[80] This facilitates a substantive and comprehensive integration of environmental considerations within all Covenant rights, which is consistent with the embedded and inescapable role of the environment in all ESCRs. Through references to existing principles of IEL the research makes use of recognised approaches to environmental challenges while supporting greater harmony between the fields of human rights law and IEL.

Given the breadth of these areas of international law, it is necessary to clarify the scope of this dissertation and the limitations thereon. There is growing pressure for the recognition of distinct environmental rights in international law.[81] While this is a potentially fruitful avenue for integrating human rights and the environment, it is beyond the scope of this research, which is specifically concerned with the interpretation and implementation of existing ESCRs under the Covenant. Focusing on existing human rights allows for the integration of environmental considerations within the established obligations that States Parties have incurred under international human rights treaties. Creating independent environmental rights or a dedicated treaty will require negotiation and States Parties' consent which will take time. As noted above, the threats to the environment are urgent and require immediate attention to the integration of environmental considerations in all human rights instruments. In any event, the recognition of a distinct environmental right would not detract from the importance of integrating relevant environmental considerations into the interpretation and

[80] On the "dynamic relationship" between article 2 and the rest of the Covenant, see CESCR *General Comment No 3: The Nature of States Parties' Obligations (Art 2, para 1 of the Covenant)* (14 December 1990) E/1991/23 para 1. See also Sepúlveda *Nature of Obligations under the ICESCR* 312.

[81] See, for example, UNHRC *Rights of the Child: Realizing the Rights of the Child through a Healthy Environment* (13 October 2020) A/HRC/RES/45/30; UNGA *Towards a Global Pact for the Environment* (14 May 2018) A/RES/72/277. See further Knox "The Global Pact for the Environment" (2019) 28 *RECIEL* 40-47; International Group of Experts for the Pact "Text of the Draft Global Pact for the Environment by the IGEP" (2017) *Global Pact for the Environment* <https://globalpactenvironment.org/en/document/draft-global-pact-for-the-environment-by-the-igep/> (accessed 15-10-2020). See also Atapattu *HR Approaches to Climate Change* 51-62. See also 1 1 above.

implementation of States Parties' obligations under the Covenant. Even if an internationally recognised environmental right is established, the Committee would still need to consider the environmental dimensions of Covenant rights in fulfilling its mandate to interpret the Covenant in accordance with the relevant principles of human rights treaty interpretation.

The emphasis on States Parties' obligations means that the environmental dimensions of specific individual rights in the Covenant are not examined in great detail in this research. The States Parties' obligations in article 2(1) of the Covenant do, however, apply to all substantive ESCRs.[82] The obligations in article 2(1) encompass a number of important concepts. Particular attention is given in this dissertation to the notions of maximum available resources, core obligations, progressive realisation, and non-retrogression. Other elements of article 2(1), such as the obligation of international assistance and cooperation, are incorporated where relevant.

It is also important to emphasise that this dissertation investigates the Covenant and the work of the Committee on Economic, Social and Cultural Rights. The Committee's general comments, statements and concluding observations are therefore primary sources. Although it is possible, and perhaps inevitable, that environmental considerations will form part of the Committee's evolving jurisprudence under the Optional Protocol to the ICESCR,[83] the subject matter of the complaints received thus far has not included factors directly related to the environment, natural resources or climate change. The Committee's jurisprudence under the Optional Protocol is therefore not considered in any detail in this dissertation.

While other human rights treaties and human rights tribunals include economic, social and cultural rights (and civil and political rights) that should similarly integrate environmental factors, the detailed consideration of the jurisprudence of additional international and regional human rights tribunals is beyond the scope of this dissertation. However, given the influence of the Committee and its interpretations of the Covenant on the approach to ESCRs in regional and domestic human rights law, this research is likely to have relevance beyond the Committee and the Covenant itself.

With regard to the principles of IEL, the scope of this research does not allow for the analysis of every emerging and existing principle of environmental law that has been identified.[84] The selection of principles that are used to guide the interpretation of the

[82] CESCR *General Comment No 3* para 1.
[83] Optional Protocol to the International Covenant on Economic, Social and Cultural Rights (adopted 10 December 2008, entered into force 5 May 2013) A/RES/63/117.
[84] Instruments containing lists of environmental principles include, for example: soft law declarations (such as the Report of the World Commission on Environment and Development: Our Common Future (1987) A/42/427;

Covenant is therefore limited to those that have been most widely recognised and accepted in international law. In addition, it is necessary to point out that this dissertation does not purport to apply international environmental law rules and principles to human rights law in the international arena, as applying another autonomous body of international law would go beyond the scope of the Committee's mandate. The emphasis remains on States Parties' obligations under the Covenant, and IEL is referenced to the extent that it is relevant for the principles and their value in guiding the interpretation of the Covenant.

1 5 Methodology

1 5 1 Human rights approaches to environmental protection

There are three primary human rights approaches to environmental protection identified in the literature. The first concerns the mobilisation of existing human rights for environmental protection, primarily through the use of procedural rights, which has been referred to as "the environmental democracy theory".[85] The second approach involves broadening the scope of existing human rights to incorporate relevant environmental dimensions through interpretation, which can be described as "the expansion theory".[86] Finally, environmental protection and human rights can be approached by focusing on the establishment of new and distinct environmental rights, also known as "the genesis theory".[87]

This dissertation follows what Leib calls the expansion theory, which requires the reinterpretation and expansion of existing human rights to allow for the incorporation of

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Declaration of the United Nations Conference on the Human Environment (Stockholm, June 1972) A/CONF48/14/REV1; Rio Declaration on Environment and Development (Rio de Janeiro, June 1992) A/CONF151/26) and documents drafted by certain international bodies or organisations (such as the International Law Association's New Delhi Declaration on the Principles of International Law Relating to Sustainable Development (August 2002) A/CONF199/8 and the Organisation for Economic Co-operation and Development's Environmental Principles and Concepts (1995) OCDE/GD(95)124). See E Scotford *Environmental Principles and the Evolution of Environmental Law* (2017) 72-73. See also L Krämer & E Orlando (eds) *Principles of Environmental Law* (2018); P Sands, J Peel, AF Aguilar & R Mackenzie *Principles of International Environmental Law* 4 ed (2018) 197-251.

[85] Leib *HR and the Environment* 81. See also MR Anderson "Human Rights Approaches to Environmental Protection: An Overview" in AE Boyle & MR Anderson (eds) *Human Rights Approaches to Environmental Protection* (1998) 1 4; Chuffart & Viñuales "From the Other Shore" in *ESCR in International Law* 288.

[86] Leib *HR and the Environment* 71-72. See also Anderson "Human Rights Approaches to Environmental Protection: An Overview" in *HR Approaches to Environmental Protection* 4; Chuffart & Viñuales "From the Other Shore" in *ESCR in International Law* 288; AC Kiss & D Shelton *International Environmental Law* 3 ed (2004) 663; Shelton (2006) *DJILP* 130.

[87] Leib *HR and the Environment* 88. See also Anderson "Human Rights Approaches to Environmental Protection: An Overview" in *HR Approaches to Environmental Protection* 4; Chuffart & Viñuales "From the Other Shore" in *ESCR in International Law* 288; AC Kiss & D Shelton *International Environmental Law* 3 ed (2004) 663; Shelton (2006) *DJILP* 130.

environmental dimensions.[88] The expansion theory will be used in relation to the interpretation of States Parties' obligations under article 2(1). The term "greening" is used throughout this dissertation to denote the interpretation of human rights treaty provisions so as to integrate environmental considerations in accordance with this approach. The interpretation of existing human rights in accordance with the expansion theory has many potential benefits for environmental protection, and therefore for the continued feasibility and promotion of the rights themselves. In contrast to substantive environmental rights, which are still being debated in the international arena, the rights and obligations in the Covenant are already accepted and established, allowing for a broader possible acceptance of the environmental dimensions thereof.[89] From a human rights-based perspective, it is essential to take environmental considerations into account in the interpretation of the Covenant to ensure that (1) the environment is adequately protected in order to preserve its human rights-supporting functions; and (2) the enjoyment of human rights is not unduly impeded by the threats of environmental degradation and climate change.

1 5 2 Interpretation of human rights treaties

In order to interpret the Covenant from an environmental perspective by integrating environmental considerations, it is necessary to adhere to the established general rules and principles of treaty interpretation in international law. In addition to this, the particular interpretive methods applicable to human rights treaties are important for the interpretation of the Covenant.

The starting point for international treaty interpretation is the Vienna Convention on the Law of Treaties ("VCLT"),[90] particularly articles 31 and 32 thereof. Article 31(1) of the VCLT states that: "A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose".[91] This dissertation examines the interpretive methodologies that flow from the provisions of the VCLT, with attention to how these methodologies have been applied by

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[88] Leib *Human Rights and the Environment* 71-72. See also Anderson "Human Rights Approaches to Environmental Protection: An Overview" in *HR Approaches to Environmental Protection* 4; Kiss & Shelton *International Environmental Law* 663.

[89] In relation to the establishment of substantive environmental rights in international law, see for example, Knox (2019) *RECIEL* 40-47; Knox & Pejan (eds) *The Human Right to a Healthy Environment* (2018); Atapattu *HR Approaches to Climate Change* 51-62; Atapattu (2002) *Tulane Environmental Law Journal* 65-126; Rodriguez-Rivera (2001) *CJIELP* 1-46.

[90] Vienna Convention on the Law of Treaties (adopted 23 May 1969, entered into force 27 January 1980) 1155 UNTS 331.

[91] See M Fitzmaurice "Interpretation of Human Rights Treaties" in D Shelton (ed) *The Oxford Handbook of International Human Rights Law* (2013) 739 760-764 for an analysis of article 31(1) of the VCLT in the context of human rights tribunals.

human rights tribunals. This is done with reference to the jurisprudence of international tribunals, and human rights tribunals in particular, as well as academic scholarship in this regard.

In particular, human rights tribunals follow a teleological approach to interpretation emphasising that human rights treaties are "live instruments, whose interpretation must go hand in hand with evolving times and current living conditions".[92] The teleological approach of human rights tribunals is examined in Chapter 2, along with the related principle of effectiveness and the evolutive approach to interpretation. The particular methodologies employed by the Committee are also investigated.

This dissertation relies primarily on teleological interpretation for an interpretation of the Covenant that integrates environmental considerations. Most notably, the principles of effectiveness and evolutive interpretation open the door for a broader interpretation of the Covenant that allows for the integration of environmental dimensions into existing provisions, thereby "greening" the rights and obligations in the Covenant.[93] An interpretation of the Covenant that appropriately incorporates environmental considerations can ensure that the Covenant does not become obsolete and irrelevant to present-day challenges. Although the Committee has already made some important steps towards taking the environment into account, a more deliberate, systematic and comprehensive effort is required in order to meet the vast and urgent challenges of environmental degradation and climate change.

1 5 3 Primary sources arising from the supervisory mandate of the Committee

In addition to the abovementioned interpretive methods, it is important to consider the role of the Committee and its supervisory mandate in relation to the Covenant. Supervision of the Covenant is entrusted to the Economic and Social Council of the United Nations ("ECOSOC") and the Committee on Economic, Social and Cultural Rights has been established by means of a resolution of the ECOSOC.[94] The Committee exercises its supervisory mandate through its concluding observations, general comments, statements,

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[92] *Mapiripán Massacre vs Colombia* Series C No 122 (2005) IACtHR para 106. See Alston & Goodman *International Human Rights* 117-118 where it is noted that "[t]he long-term treaty must rest upon a certain flexibility and room for development if it is to survive changes in circumstances and relations between the parties".

[93] See Sepúlveda *Nature of Obligations under the ICESCR* 79-81.

[94] UN Economic and Social Council *Decision 1978/10* (3 May 1978); UN Economic and Social Council *Resolution 1985/17* (28 May 1985). See also E Riedel, G Giacca & C Golay "The Development of Economic, Social, and Cultural Rights in International Law" in E Riedel, G Giacca & C Golay (eds) *Economic, Social and Cultural Rights in International Law: Contemporary Issues and Challenges* (2014) 3 7; Craven MCR *The International Covenant on Economic, Social and Cultural Rights: A Perspective on its Development* (1995) 49.

and views under the Optional Protocol to the ICESCR.[95] These are fundamental sources to consider when interpreting the rights and obligations under the Covenant and it is therefore necessary to note the role of these sources. Concluding observations of the Committee are the outcome of the reporting process wherein States Parties participate in a "constructive and mutually rewarding dialogue" with the Committee.[96] The Committee comments on the State Party's compliance with the obligations in the Covenant through its concluding observations.[97] While these are not judicial pronouncements, they are valuable in providing clarity on the meaning, nature and content of Covenant obligations.[98] General comments are another mechanism for developing the understanding of norms in the Covenant whereby the Committee assists States Parties in fulfilling their reporting obligations through developing and clarifying its interpretation of Covenant provisions.[99] Although general comments are not binding *per se*, Craven notes that the Committee's interpretations do have "considerable legal weight".[100] The Committee also contributes to the interpretation of the Covenant through its views expressed in jurisprudence under the Optional Protocol.[101] Through interpreting the Covenant in relation to a specific case, the Committee is able to further "crystallize the normative content and scope of each Covenant right".[102] Finally, it is necessary to note that the Committee also adopts statements in relation to specific topical issues or themes. As Liebenberg notes, these are intended as "responses to the contemporary developments affecting Covenant rights".[103] While these statements have less authoritative status than general comments or views under the Optional Protocol, they remain "indicative of an emerging consensus" regarding the application of Covenant rights to contemporary circumstances.[104]

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[95] Optional Protocol to the International Covenant on Economic, Social and Cultural Rights (adopted 10 December 2008, entered into force 5 May 2013) A/RES/63/117.
[96] Craven *The ICESCR: A Perspective on its Development* 66-67.
[97] Craven *The ICESCR: A Perspective on its Development* 57.
[98] Riedel, Giacca & Golay "The Development of ESCR in International Law" in *ESCR in International Law* 11. See also O De Schutter *International Human Rights Law: Cases, Materials, Commentary* 3 ed (2019) 920-925 on the nature and status of concluding observations of UN treaty bodies.
[99] Craven *The ICESCR: A Perspective on its Development* 89, 90 & 92; M Odello & F Seatzu *The UN Committee on Economic, Social and Cultural Rights: The Law, Process and Practice* (2013) 29.
[100] Craven *The ICESCR: A Perspective on its Development* 91. See also Sepúlveda *Nature of Obligations under the ICESCR* 88; Odello & Seatzu *The UN Committee on ESCR* 29, 33 & 195; K Mechlem "Treaty Bodies and the Interpretation of Human Rights" (2009) 42 *Vanderbilt Journal of Transnational Law* 905 927 & 929.
[101] Riedel, Giacca & Golay "The Development of ESCR in International Law" in *ESCR in International Law* 11 & 35.
[102] Riedel, Giacca & Golay "The Development of ESCR in International Law" in *ESCR in International Law* 35.
[103] S Liebenberg "South Africa and the International Covenant on Economic, Social and Cultural Rights: Deepening the Synergies" (2020) 3 *South African Judicial Education Journal* 13 27.
[104] Liebenberg (2020) *South African Judicial Education Journal* 27.

The Committee's general comments, statements and concluding observations will be considered in the interpretation of the provisions of the Covenant in this dissertation. As noted above, the Committee's views under the Optional Protocol have not yet addressed environmental concerns in any detail, but they will be referenced where relevant to the current interpretation of the Covenant.

1 6 Overview of Chapters

Chapter 2 investigates the relationship between the Covenant and the environment. The detrimental impacts of environmental degradation and climate change on human rights, and ESCRs in particular, are surveyed. This is followed by a close examination of how the Committee's general comments, statements and concluding observations have dealt with environmental factors, such as those related to environmental harm, climate change, pollution, natural resource exploitation and sustainable development.

Chapter 3 examines the interpretive methodology that is applied in the later chapters. It begins with an overview of human rights approaches to environmental protection, affirming that this dissertation follows the expansion theory, which supports the interpretation of existing human rights to incorporate environmental dimensions. This is followed by an analysis of the nature of legal interpretation, the rules of treaty interpretation as they appear in the VCLT, and the rules and principles applicable to human rights treaty interpretation. Finally, the interpretive approaches of the Committee are analysed.

The principles of IEL are investigated in Chapter 4. The chapter begins with an examination of the relationship between rules and principles. This is followed by a general analysis of principles of IEL and a description of the principles selected for this study. Each principle is then examined and defined in relation to its meaning and status in international environmental law. The selected principles include: sustainable development and the related principles of integration, sustainable use, intergenerational equity, and intragenerational equity; prevention and the related no-harm principle, sovereignty over natural resources, preventive principle, and precautionary principle; the polluter pays principle; and the principle of common but differentiated responsibilities. These principles will guide the interpretation of key elements of article 2(1) in Chapters 5 and 6.

The focus of Chapter 5 is on the obligation on States Parties to use the "maximum of available resources" for the realisation of Covenant rights. This chapter investigates how the concept of maximum available resources should be interpreted to include environmental considerations. Particular attention is paid to the role of natural resources, and the chapter

begins with an investigation of the right to self-determination in article 1 of the Covenant, which is closely associated with the use of natural resources. The examination and interpretation of maximum available resources is carried out with reference to core elements of the concept, namely: the meaning of resources; the availability of resources; the meaning of "maximum"; and the obligation of equitable and effective use of resources. The interpretation of each of these elements in the Committee's current doctrine is examined. This analysis of the current interpretation is followed by an investigation of the environmental dimensions of each element, with reference to the principles of IEL examined in Chapter 4. It concludes with proposing an interpretation of each element of maximum available resources that appropriately integrates the environment.

Chapter 6 examines the notion of core obligations as well as the obligations of progressive realisation and non-retrogression. As with Chapter 5, the current interpretation of each of these concepts is analysed, followed by an investigation of the environmental dimensions, with reference to the principles of IEL. With respect to the concept of progressive realisation, this chapter emphasises the forward-looking dimension of progressive realisation and also examines the relevance of future generations under the Covenant.

Finally, Chapter 7 of the dissertation consolidates the findings of Chapters 5 and 6 by providing a synthesis of how the selected principles of IEL should guide the interpretation of States Parties' obligations in article 2(1) of the Covenant. Following this, the chapter considers the aspects of States Parties' obligations that have been examined in the preceding chapters, highlighting the most important elements of an interpretation of article 2(1) that integrates environmental considerations.

1 7 Conclusion

The enjoyment of the ESCRs under the Covenant cannot be secured without the integration of environmental considerations within States Parties' obligations under the Covenant. The immense threats to ESCRs as a result of environmental degradation and climate change require urgent action from States Parties to the Covenant. The Committee must, therefore, incorporate obligations that relate to the environment within its understanding of article 2(1) of the Covenant. This can be achieved through an expansion or reinterpretation of the Covenant to include the environmental dimensions of the rights and obligations therein. This greening of the Covenant must follow the rules applicable to the interpretation of treaties, particularly those applied to the interpretation of human rights treaties. Such interpretive methods include teleological interpretation which emphasises the

object and purpose of a treaty, and the principles of effectiveness and evolutive interpretation.

This dissertation therefore proposes an interpretation of States Parties' general obligations in article 2(1) of the Covenant that actively integrates the environment and is guided by established principles of IEL, with a particular emphasis on the notions of maximum available resources, core obligations, progressive realisation and the duty of non-retrogression. The ultimate aim of greening of States Parties' obligations under the Covenant is to ensure its relevance and responsiveness to the urgent and existential environmental challenges confronting humanity.

CHAPTER 2:
THE COVENANT AND THE ENVIRONMENT

2 1 Introduction

The state of the environment has significant consequences for human life on Earth, and therefore for human rights. Climate change and environmental degradation pose serious threats to human rights and should be taken into account when interpreting the human rights obligations of states. Environment-related human rights obligations have been investigated and reported on, in particular, by the UN Human Rights Council ("UNHRC") and various special rapporteurs, including Special Rapporteurs on the Issue of Human Rights Obligations relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment. In relation to the Covenant, the Committee on Economic, Social and Cultural Rights ("Committee" or "CESCR") has increasingly incorporated environmental considerations and environment-related obligations within its work, particularly in recent years.

This chapter begins with an overview of the impacts of environmental degradation and climate change on human life with reference to reports of, among others, the UN Environment Programme ("UNEP") and the Intergovernmental Panel on Climate Change ("IPCC"). Environment-related human rights obligations are then considered in relation to the work of various special rapporteurs and independent experts. The chapter will then examine how the Committee has incorporated environmental considerations in the performance of its mandate under the Covenant with reference to its statements, general comments and concluding observations. As will be seen below, the Committee has been receptive to accommodating the environmental dimensions of the rights and obligations in the Covenant. The chapter concludes by arguing that, despite these developments, the Committee's approach lacks a systematic methodology for incorporating environmental considerations in the interpretation of the Covenant. It is proposed that established principles of IEL can inform such a systematic methodology.

2 2 Human rights and the environment: Impacts and obligations

2 2 1 Environmental threats to human rights

There can be no doubt that the global state of the environment has extensive consequences for the enjoyment of human rights. It is widely acknowledged, and self-evident, that the very existence of human beings is dependent on the environment and the

resources it provides.[1] The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services ("IPBES") explains:

> "Nature, through its ecological and evolutionary processes, sustains the quality of the air, fresh water and soils on which humanity depends, distributes fresh water, regulates the climate, provides pollination and pest control and reduces the impact of natural hazards".[2]

The first major assessment of the health of earth's ecosystems and their relationship with human well-being was carried out between 2001 and 2005.[3] Called for by the then UN Secretary-General Kofi Annan, the *Millennium Ecosystem Assessment* is "a major international collaborative effort to map the health of our planet".[4] The assessment describes the benefits and contributions received from the environment in terms of four types of ecosystem services:

> "*[P]rovisioning services* such as food, water, timber, and fiber; *regulating services* that affect climate, floods, disease, wastes, and water quality; *cultural services* that provide recreational, aesthetic, and spiritual benefits; and *supporting services* such as soil formation, photosynthesis, and nutrient cycling".[5]

Each of these ecosystem services form an essential part of human health and well-being. UNEP has described ecosystem services as environmental endowments which include "clean air to breathe; clean water to drink; food to eat; fuels for energy; protection from storms, floods, fires and drought; climate regulation and disease control; and places to congregate for aesthetic, recreational and spiritual enjoyment".[6] UNEP affirms that these ecosystem services are "essential to core survival and vital to human flourishing".[7] Considering the broad range of ecosystem services that the natural environment provides, it is clear that full realisation of human rights and the promotion of human well-being cannot be achieved without reliance on the environment.[8]

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[1] IPBES "Summary for policymakers" in S Díaz, J Settele, ES Brondízio, HT Ngo, M Guèze, J Agard, A Arneth, P Balvanera, KA Brauman, SHM Butchart, KMA Chan, LA Garibaldi, K Ichii, J Liu, SM Subramanian, GF Midgley, P Miloslavich, Z Molnár, D Obura, A Pfaff, S Polasky, A Purvis, J Razzaque, B Reyers, R Roy Chowdhury, YJ Shin, IJ Visseren-Hamakers, KJ Willis & CN Zayas (eds) *Global Assessment Report on Biodiversity and Ecosystem Services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services* (2019) 10. See also Handl G "Human Rights and Protection of the Environment" in Eide A, C Krause & A Rosas (eds) *Economic, Social and Cultural Rights: A Textbook* 2 revised ed (2001) 303 303.

[2] IPBES "Summary for policymakers" in *Global Assessment Report on Biodiversity and Ecosystem Services* 10.

[3] Millennium Ecosystem Assessment *Ecosystems and Human Well-Being: Synthesis* (2005).

[4] Annan K *We the Peoples: The Role of the United Nations in the 21st Century* (2000) 65.

[5] Millennium Ecosystem Assessment *Ecosystems and Human Well-Being* v (emphasis in original).

[6] UNEP *Climate Change and Human Rights* (2015) 1.

[7] UNEP *Climate Change and HR* 1.

[8] Although widely employed, the concept of 'eco-system services' is not without criticism. Kate Raworth argues that the terminology of 'natural capital' and 'ecosystem services' can be problematic as it "simply shifts the living world from being man's material means to being an asset on his balance sheet". See K Raworth *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist* (2017) 116. For present purposes it is sufficient to note that the environment is essential for human flourishing as it supports and provides for life and the enjoyment of human rights and freedoms through various means.

Although human beings are dependent on the planet for their continued existence, there are numerous threats to the environment and therefore to the life-supporting services it provides. The IPBES notes, for example, that "the great majority of indicators of ecosystems and biodiversity [are] showing rapid decline".[9] One of the most pressing environmental challenges is climate change and the myriad of impacts on human and natural systems that are likely to result from global warming.[10] The *2019 Global Environment Outlook 6: Healthy Planet, Healthy People* ("*GEO-6 Report*") describes climate change as "a global driver of environmental, social, health and economic impact and heightened society-wide risks".[11] In its 2019 statement on the climate, the World Meteorological Organization ("WMO") notes the following:

> "Climate-related events already pose risks to society through impacts on health, food and water security as well as human security, livelihoods, economies, infrastructure and biodiversity. Climate change also has severe implications for ecosystem services. It can affect patterns of natural resource use, as well as the distribution of resources across regions and within countries".[12]

Where action is not taken to reduce greenhouse gas ("GHG") emissions, the risk of dramatic climate change impacts will increase. Extreme weather events, persistent drought, heat waves, and changes in disease vectors[13] will continue to threaten livelihoods, health, water, food and energy security.[14] These impacts are likely to lead to an increase in poverty, migration, forced displacement and conflict.[15] Sudden-onset environmental disasters affect an increasing number of people and have the potential to "set back development gains by years or even decades, at immense social and economic cost".[16] In 2016, for example, the number of people displaced by disasters "outnumbered those who were newly displaced by conflict and violence three to one".[17]

Combined with climate change, numerous additional risks are posed by environmental challenges related to, for example, air pollution, loss of biodiversity, acidification and

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[9] IPBES "Summary for policymakers" in *Global Assessment Report on Biodiversity and Ecosystem Services* 11.
[10] UNEP *Global Environment Outlook 6: Summary for Policymakers* (2019) 7.
[11] UNEP *GEO-6: Summary for Policymakers* 7.
[12] WMO *Statement on the State of the Global Climate in 2019* WMO-No 1248 (2020) 27.
[13] UNEP *Global Environment Outlook 6: Healthy Planet, Healthy People* (2019) 47. See also WMO *State of the Global Climate in 2019* 23-25 & 27-28; UNDP *Human Development Report 2019: Beyond Income, Beyond Averages, Beyond Today: Inequalities in Human Development in the 21st century* (2019) 180.
[14] UNEP *GEO-6: Summary for Policymakers* 14; UNEP *GEO-6: Healthy Planet, Healthy People* 86. See also WMO *State of the Global Climate in 2019* 27.
[15] UNEP *GEO-6: Healthy Planet, Healthy People* 76 & 86; UNEP *GEO-6: Summary for Policymakers* 7.
[16] UNEP *GEO-6: Healthy Planet, Healthy People* 79.
[17] UNEP *GEO-6: Healthy Planet, Healthy People* 80. See also WMO *State of the Global Climate in 2019* 30 which notes that Asia and the Pacific are particularly vulnerable to such disasters. The WMO also notes that refugee populations are often resident in climate hotspots and at risk of secondary displacement.

pollution of oceans, land degradation and deforestation, and scarcity and pollution of freshwater resources. In 2015 approximately 9 million deaths were caused by environmental pollution, primarily from air pollution and contaminated water.[18] Air pollution contributes substantially to the burden of disease worldwide and causes up to seven million premature deaths annually.[19] Exposure to ambient particulate matter has been described as "the highest environmental risk factor for the global burden of disease".[20] Already vulnerable populations such as "the elderly, very young, ill and poor" are also more susceptible to the impacts of air pollution.[21] Early evidence suggests, for example, that exposure to air pollution may be linked to an increased risk of infection in relation to COVID-19.[22] Polluted water and lack of access to adequate sanitation result in roughly 1.4 million deaths annually from preventable diseases.[23] The global water cycle is affected by "population growth, agriculture, economic development, urbanization, industrialization, deforestation and climate change" with these factors having a detrimental effect on the quality and quantity of freshwater supplies.[24]

Food security is also threatened by climate change and environmental degradation.[25] For example, crop production is adversely impacted by changes in rainfall and temperatures as well as the spread of invasive species.[26] The *GEO-6 Report* notes that "[c]urrent environmental pressures from the global food system cannot be sustained".[27] However, in order to meet the projected demands of the population in 2050 "world agricultural production would need to increase by 50 per cent from 2013 levels".[28] In addition to these challenges, the increased prevalence and severity of extreme weather events will have a significant impact on the stability of food prices and food supply,[29] while the decline in biodiversity

[18] UNEP *GEO-6: Summary for Policymakers* 14; UNEP *GEO-6: Healthy Planet, Healthy People* 78.
[19] UNEP *GEO-6: Healthy Planet, Healthy People* 108 & 125. See also WMO *State of the Global Climate in 2019* 27.
[20] UNEP *GEO-6: Healthy Planet, Healthy People* 125.
[21] UNEP *GEO-6: Healthy Planet, Healthy People* 126.
[22] Cole M, C Ozgen & E Strobl "Air Pollution Exposure Linked to Higher COVID-19 Cases and Deaths: New Study" (20-07-2020) *World Economic Forum & The Conversation* <https://www.weforum.org/agenda/2020/07/air-pollution-exposure-covid19-cases-deaths-study> (accessed 25-01-2021). With regard to the relationship between air pollution and COVID-19 mortality rates see, for example, Pozzer A, F Dominici, A Haines, C Witt, T Münzel & J Lelieveld "Regional and Global Contributions of Air Pollution to Risk of Death from COVID-19" (2020) 116 *Cardiovascular Research* 2247 2247–2253.
[23] UNEP *GEO-6: Summary for Policymakers* 12; UNEP *GEO-6: Healthy Planet, Healthy People* 236 & 246.
[24] UNEP *GEO-6: Healthy Planet, Healthy People* 236.
[25] See, for example, WMO *State of the Global Climate in 2019* 33-34 on food insecurity and displacement in the Greater Horn of Africa.
[26] UNEP *GEO-6: Healthy Planet, Healthy People* 128. WMO *State of the Global Climate in 2019* 29.
[27] UNEP *GEO-6: Healthy Planet, Healthy People* 96.
[28] UNEP *GEO-6: Healthy Planet, Healthy People* 96.
[29] UNEP *GEO-6: Healthy Planet, Healthy People* 128. See also WMO *State of the Global Climate in 2019* 29 which states that "climate variability and extreme weather events are among the key drivers of the recent rise in global hunger".

further threatens food security.[30] Disasters resulting from extreme weather events can have a particularly severe impact in states "with pre-existing vulnerabilities such as high levels of poverty and undernutrition",[31] thereby compounding the situation.[32]

Threats to biodiversity have a significant impact on human health and well-being.[33] The *GEO-6 Report* advises that a "major species extinction event, compromising planetary integrity and Earth's capacity to meet human needs, is unfolding".[34] One of the ways this event manifests is through the emergence of infectious diseases "driven by activities that affect biodiversity".[35] This is evidenced by, for example, the COVID-19 pandemic.[36] In addition, those whose livelihoods depend on natural resources – often indigenous peoples, peasants, and those working in rural areas – are disproportionately affected by declining biodiversity.[37] Not only are these individuals and communities disproportionately affected, but approximately 70% of them are already living in poverty.[38] Deforestation, for example, threatens the livelihoods of up to 73 million people employed in the formal and informal sectors.[39]

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[30] Highlighting the importance of biodiversity, the IPBES notes that "more than 75 per cent of global food crop types, including fruits and vegetables and some of the most important cash crops, such as coffee, cocoa and almonds, rely on animal pollination". See IPBES "Summary for policymakers" in *Global Assessment Report on Biodiversity and Ecosystem Services* 10. See also UNEP *GEO-6: Summary for Policymakers* 8; UNEP *GEO-6: Healthy Planet, Healthy People* 153-154.

[31] UNEP *GEO-6: Healthy Planet, Healthy People* 128. See also UNDP *Human Development Report 2019* 180.

[32] See WMO *State of the Global Climate in 2019* 29. See also "Summary for policymakers" in *Global Assessment Report on Biodiversity and Ecosystem Services* 12.

[33] See, generally, ES Brondizio, J Settele, S Díaz & HT Ngo (eds) *Global Assessment Report on Biodiversity and Ecosystem Services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services* (2019).

[34] UNEP *GEO-6: Summary for Policymakers* 8; UNEP *GEO-6: Healthy Planet, Healthy People* 144.

[35] UNEP *GEO-6: Summary for Policymakers* 8; UNEP *GEO-6: Healthy Planet, Healthy People* 144 & 162; UNDP *Human Development Report 2019* 180; WMO *State of the Global Climate in 2019* 27-28; UNEP *Frontiers 2018/2019: Emerging Issues of Environmental Concern* (2019) 10.

[36] See, for example, Vittor AY, Laporta GZ & Sallum MAM "How Deforestation Helps Deadly Viruses Jump from Animals to Humans" (25-06-2020) *The Conversation* <https://theconversation.com/how-deforestation-helps-deadly-viruses-jump-from-animals-to-humans-139645> (accessed 04-02-2021). See, generally, IPBES "Executive Summary" in P Daszak, C das Neves, J Amuasi, D Hayman, T Kuiken, B Roche, C Zambrana-Torrelio, P Buss, H Dundarova, Y Feferholtz, G Foldvari, E Igbinosa, S Junglen, Q Liu, G Suzan, M Uhart, C Wannous, K Woolaston, P Mosig Reidl, K O'Brien, U Pascual, P Stoett, H Li, HT Ngo (eds) *Workshop Report on Biodiversity and Pandemics of the Intergovernmental Platform on Biodiversity and Ecosystem Services* (2020).

[37] UNEP *Frontiers 2018/2019* 41; IPBES "Summary for policymakers" in *Global Assessment Report on Biodiversity and Ecosystem Services* 14-15 & 18. In relation to the rights of peasants and those working in rural areas, see UNGA *United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas* (21 January 2019) A/RES/73/165.

[38] The GEO-6 Report indicates that "[t]he livelihoods of 70 per cent of people living in poverty directly depend on natural resources". See UNEP *GEO-6: Summary for Policymakers* 9.

[39] According to the GEO-6 Report "over 13 million people are employed in the formal forest sector, and another 40-60 million people may be employed in informal small and medium-sized forest operations". See UNEP *GEO-6: Healthy Planet, Healthy People* 162.

Another area of concern is environmental degradation of oceans caused primarily by warming and pollution.[40] The ongoing environmental health of oceans is crucial for the 58 to 120 million people whose livelihoods are supported by small-scale fisheries.[41] The loss of coral reefs due to coral bleaching also impacts on "fisheries, tourism, community health, livelihoods and marine habitats".[42] The overexploitation of marine living resources further exacerbates these problems, leading to population decline.[43] The *GEO-6 Report* notes that in 2015, for example, "over 50 per cent of the stocks in the Mediterranean, Black Sea, the Pacific Southwest and the Atlantic Southwest were fished at biologically unsustainable levels".[44] In 2018 the IPCC warned that global warming of 1.5 degrees Celsius may result in a "projected decrease in global annual catch for marine fisheries of about 1.5 million tonnes" whereas an increase of 2 degrees Celsius could amount to a loss of over 3 million tonnes.[45]

What is particularly concerning is that nearly all of these impacts from climate change and environmental degradation are significantly worse for already disadvantaged populations, including women, children, the elderly, the poor, peasants, indigenous peoples and, more broadly, developing states.[46] The *2018 IPCC Report on Global Warming of 1.5°C* notes, for example, that groups at higher risk from the impacts of climate change include

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[40] UNEP *GEO-6: Summary for Policymakers* 9.
[41] UNEP *GEO-6: Summary for Policymakers* 10.
[42] UNEP *GEO-6: Summary for Policymakers* 10. See also UNEP *GEO-6: Healthy Planet, Healthy People* 186; WMO *State of the Global Climate in 2019* 32.
[43] UNEP *GEO-6: Healthy Planet, Healthy People* 159; WMO *State of the Global Climate in 2019* 32.
[44] UNEP *GEO-6: Healthy Planet, Healthy People* 159.
[45] O Hoegh-Guldberg, D Jacob, M Taylor, M Bindi, S Brown, I Camilloni, A Diedhiou, R Djalante, K Ebi, F Engelbrecht, J Guiot, Y Hijioka, S Mehrotra, A Payne, S Seneviratne, A Thomas, R Warren & G Zhou "Impacts of 1.5ºC Global Warming on Natural and Human Systems" in V Masson-Delmotte, P Zhai, H Pörtner, D Roberts, J Skea, P Shukla, A Pirani, W Moufouma-Okia, C Péan, R Pidcock, S Connors, J Matthews, Y Chen, X Zhou, M Gomis, E Lonnoy, T Maycock, M Tignor & T Waterfield (eds) *Global Warming of 1.5°C: An IPCC Special Report on the Impacts of Global Warming of 1.5°C above Pre-Industrial Levels and Related Global Greenhouse Gas Emission Pathways, in the Context of Strengthening the Global Response to the Threat of Climate Change, Sustainable Development, and Efforts to Eradicate Poverty* (2018) 175 238.
[46] See UNEP *GEO-6: Healthy Planet, Healthy People* 48, 76, 86, 126 & 128; UNEP *GEO-6: Summary for Policymakers* 12 & 9; Hoegh-Guldberg et al "Impacts of 1.5ºC Global Warming on Natural and Human Systems" in *Global Warming of 1.5°C: An IPCC Special Report* 234-235 & 244-245; J Roy, P Tschakert, H Waisman, S Abdul Halim, P Antwi-Agyei, P Dasgupta, B Hayward, M Kanninen, D Liverman, C Okereke, P Pinho, K Riahi & A Suarez Rodriguez "Sustainable Development, Poverty Eradication and Reducing Inequalities" in V Masson-Delmotte, P Zhai, H Pörtner, D Roberts, J Skea, P Shukla, A Pirani, W Moufouma-Okia, C Péan, R Pidcock, S Connors, J Matthews, Y Chen, X Zhou, M Gomis, E Lonnoy, T Maycock, M Tignor & T Waterfield (eds) *Global Warming of 1.5°C: An IPCC Special Report* (2018) 445 452-453. See also UNHRC *Report of the Independent Expert on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment, John H Knox: Mapping Report* (30 December 2013) A/HRC/25/53 para 23-25; UNHRC *Human Rights and the Environment* (7 April 2015) A/HRC/RES/28/11; UNHRC *Question of the Realization in all Countries of Economic, Social and Cultural Rights: Report of the Secretary-General on the Role of Economic, Social and Cultural Rights in Building Sustainable and Resilient Societies for the Implementation of the 2030 Agenda for Sustainable Development* (18 December 2017) A/HRC/37/30 paras 45-47.

"disadvantaged and vulnerable populations, some indigenous peoples, and local communities dependent on agricultural or coastal livelihoods", while the regions at a higher risk include small island developing states, and least developed states.[47] It is important to note that the aforementioned local communities dependant on agricultural or coastal livelihoods are also rights-holders under the UN Declaration on the Rights of Peasants and Other People Working in Rural Areas ("UNDROP").[48] The IPBES similarly notes that the areas most affected by climate change and environmental degradation "are also home to large concentrations of indigenous peoples and many of the world's poorest communities".[49] The *GEO-6 Report* adds that the potential impacts are most severe for those who depend greatly on natural resources and for "those experiencing multiple forms of inequality, marginalization and poverty, thereby amplifying existing risks and creat[ing] new ones".[50] Philip Alston, the former Special Rapporteur on Extreme Poverty and Human Rights, suggests that, unless human rights are considered in climate change responses, the inequality resulting from climate change could become a form of "climate apartheid",[51] and that climate change constitutes "an unconscionable assault on the poor".[52] The UNDP has noted that climate change and related disasters are "disequalizing"[53] as they "deepen existing social and economic fault lines".[54] In addition to severe inequalities in the distribution of the abovementioned environmental harm, the IPBES has noted that "[n]ature's contributions to people are often distributed unequally across space and time and among different segments of society".[55]

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[47] IPCC "Summary for Policymakers" in V Masson-Delmotte, P Zhai, H Pörtner, D Roberts, J Skea, P Shukla, A Pirani, W Moufouma-Okia, C Péan, R Pidcock, S Connors, J Matthews, Y Chen, X Zhou, M Gomis, E Lonnoy, T Maycock, M Tignor & T Waterfield (eds) *Global Warming of 1.5°C: An IPCC Special Report* (2018) 1 9; Hoegh-Guldberg et al "Impacts of 1.5ºC Global Warming on Natural and Human Systems" in *Global Warming of 1.5°C: An IPCC Special Report* 244-245. See also UNEP *GEO-6: Healthy Planet, Healthy People* 46 & 86.

[48] See UNGA *United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas* (21 January 2019) A/RES/73/165.

[49] IPBES "Summary for policymakers" in *Global Assessment Report on Biodiversity and Ecosystem Services* 15.

[50] UNEP *GEO-6: Healthy Planet, Healthy People* 48.

[51] UNHRC *Climate Change and Poverty* (2019) A/HRC/41/39 paras 11-15 & 46-50.

[52] UNHRC *Climate Change and Poverty* (2019) A/HRC/41/39 para 87. In relation to inequality and climate change, see also UNDP *Human Development Report 2019* 178-184 and 195-196.

[53] In relation to disequalizing impacts see also UNDP *Human Development Report 2011: Sustainability and Equity: A Better Future for All* (2011) 4, 7 & 59-61.

[54] UNDP *Human Development Report 2019* 179. See also 184 where the report notes that this disproportionate impact is not inevitable: "The disproportionate impacts on poor countries—and poor and vulnerable people within countries—largely reflect and are likely driven at least in part by structural inequalities. If such inequalities—across income, wealth, health, education and other elements of human development—are in no small part the result of social choices, as this Report argues, the course of climate change and the way it ultimately affects inequality have a lot of choice built in. There still is time to choose differently."

[55] IPBES "Summary for policymakers" in *Global Assessment Report on Biodiversity and Ecosystem Services* 10.

The impact of the abovementioned environmental challenges on human rights is evident, and has been well-documented.[56] It is widely recognised that the impacts of environmental degradation and climate change pose serious threats to civil and political rights as well as economic, social and cultural rights, including the rights to life;[57] health;[58] food;[59] water;[60] housing;[61] and the rights to respect for privacy, family life and home.[62]

Indeed, very few dimensions of human rights remain unaffected by the state of the environment and the current climate crisis.[63] Without the essential elements for human survival, we cannot fully realise human rights. The separate opinion of Weeramantry J in *Gabčikovo-Nagymaros Project (Hungary/Slovakia)*[64] bears repeating here. He stresses that environmental protection is "a *sine qua non* for numerous human rights such as the right to health and the right to life itself" emphasising that "damage to the environment can impair and undermine all the human rights spoken of in the Universal Declaration and other human rights instruments."[65] It is crucial that environmental considerations form part of the

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[56] UNHRC *Mapping Report* (2013) A/HRC/25/53 paras 17-25; UNHRC *Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment: Climate Change* (1 February 2016) A/HRC/31/52 paras 23-32; UNHRC *Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment: Children's Rights and the Environment* (24 January 2018) A/HRC/37/58 paras 31-37; UNHRC *Climate Change and Poverty* (2019) A/HRC/41/39 paras 8-10; UNEP *Climate Change and HR* 2-8 & 12. See also, for example, S McInerney-Lankford, M Darrow & L Rajamani, *Human Rights and Climate Change: A Review of the International Legal Dimensions* (2011) 11-19.

[57] See, for example, S Atapattu *Human Rights Approaches to Climate Change* (2016) 76; DK Anton & DL Shelton *Environmental Protection and Human Rights* (2011) 436-463; McInerney-Lankford et al *HR and Climate Change* 12-14.

[58] See, for example, Atapattu *HR Approaches to Climate Change* 77-79; McInerney-Lankford et al *HR and Climate Change* 15-16.

[59] See, for example, Atapattu *HR Approaches to Climate Change* 80-82; A Franca "Climate Change and Interdependent Human Rights to Food, Water and Health" in O Quirico & M Boumghar (eds) *Climate Change and Human Rights: An International and Comparative Law Perspective* (2017) 89 90-91; McInerney-Lankford et al *HR and Climate Change* 14-15; S Jodoin & K Lofts *Economic, Social and Cultural Rights and Climate Change: A Legal Reference Guide* (2013) 65-66.

[60] See, for example, Atapattu *HR Approaches to Climate Change* 82-84; Anton & Shelton *Environmental Protection and HR* 463-487; Franca "Climate Change and Interdependent Human Rights to Food, Water and Health" in *Climate Change and HR* 90-91; McInerney-Lankford et al *HR and Climate Change* 16-17; Jodoin & Lofts *ESCR and Climate Change* 65-66.

[61] See, for example, Atapattu *HR Approaches to Climate Change* 79-80; McInerney-Lankford et al *HR and Climate Change* 17-18; Jodoin & Lofts *ESCR and Climate Change* 65-66.

[62] See, for example, Anton & Shelton *Environmental Protection and HR* 487-512; Jodoin & Lofts *ESCR and Climate Change* 50-51.

[63] For example, one could argue that aspects of certain civil and political rights are not particularly threatened by these environmental challenges, although a threat to life itself is, by extension, a threat to all human rights. See, for example, HRC *General Comment No 36 on Article 6 of the International Covenant on Civil and Political Rights, on the Right to Life* (30 October 2018) CCPR/C/GC/36 para 62. It has also been argued that climate change is a threat to civil and political rights and to democracy itself as it may open the door for states to circumscribe civil and political rights in the name of the current climate emergency. See UNHRC *Climate Change and Poverty* (2019) A/HRC/41/39 para 65.

[64] *Gabčikovo-Nagymaros Project (Hungary/Slovakia)*, Judgment, ICJ Reports (1997) 7 ('*Gabčikovo-Nagymaros'*).

[65] *Gabčikovo-Nagymaros* (Separate Opinion of Vice–President Weeramantry) 4.

approach to human rights in order to ensure that environmental degradation does not "impair and undermine" the rights themselves. Appropriate interpretation and application of human rights therefore requires an integration of environmental considerations in order to protect the environment and ensure the continued realisation of human rights.

To underscore the importance of integrating environmental considerations, it is useful to consider the impact of environmental degradation on the pursuit of the Sustainable Development Goals ("SDGs").[66] The goals are described as "integrated and indivisible" and balancing the economic, social and environmental dimensions of sustainable development.[67] The IPBES affirms that "nature is essential for achieving the Sustainable Development Goals" and warns that the current trajectory in relation to biodiversity and ecosystems is likely to undermine 80 percent of the "the assessed targets of Goals related to poverty, hunger, health, water, cities, climate, oceans and land".[68] This illustrates the futility of addressing social and economic concerns (and rights) without actively integrating the environment.[69]

Incorporating environmental considerations into human rights norms and obligations is thus essential for making human rights law more responsive to the environmental threats described above. Effective enjoyment of human rights requires the protection of the environmental foundation for human rights and indeed human life. The recognition of environmental dimensions of human rights obligations has been increasing in human rights tribunals and treaty bodies in recent years. The clearest articulation of such environment-related human rights obligations can be found in the work of the UNHRC which is discussed in more detail further below.[70]

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[66] See UNGA *Transforming Our World: The 2030 Agenda for Sustainable Development* (21 October 2015) A/RES/70/1.

[67] UNGA *Transforming Our World: The 2030 Agenda for Sustainable Development* (21 October 2015) A/RES/70/1 preamble.

[68] IPBES "Summary for policymakers" in *Global Assessment Report on Biodiversity and Ecosystem Services* 15.

[69] The IPBES notes that "[t]here is a critical need for future policy targets, indicators and datasets to more explicitly account for aspects of nature and their relevance to human well-being in order to more effectively track the consequences of trends in nature on the Sustainable Development Goals". See IPBES "Summary for policymakers" in *Global Assessment Report on Biodiversity and Ecosystem Services* 15.

[70] See 2 2 2 below. Various human rights tribunals have also extended the application and interpretation of a number of human rights to include environment-related obligations. However, this dissertation is focused on the ICESCR and the related work of the Committee in the context of the UN human rights system so the aforementioned jurisprudence will not be outlined here in any detail. For a discussion of the environment-related jurisprudence of human rights tribunals generally see, for example; OW Pedersen "Environmental Principles and the European Court of Human Rights" in L Krämer & E Orlando (eds) *Principles of Environmental Law* (2018) 578-586; P Dupuy & JE Viñuales *International Environmental Law* (2018) 365-374; R Pavoni "Environmental Jurisprudence of the European and Inter-American Courts of Human Rights: Comparative Insights" in B Boer (ed) *Environmental Law Dimensions of Human Rights* (2015) 69–106; DR Boyd *The Environmental Rights Revolution: A Global Study of Constitutions, Human Rights, and the*

2 2 2 Environment-related human rights obligations

In the area of human rights there is increasing awareness of the implications of environmental threats for the enjoyment of human rights and, consequently, increased recognition of human rights obligations relating to the environment. In particular, the UNHRC has explored the relationship between human rights and the environment through the work of an independent expert and special rapporteur on human rights obligations relating to the environment. In 2012 the UNHRC appointed "an independent expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment".[71] Following an initial three year appointment, the mandate of the independent expert, John Knox, was extended in 2015 for a further three years and amended to the position of special rapporteur.[72] In 2018 the mandate for the special rapporteur was once again extended, and awarded to David Boyd.[73] The contents of the former Independent Expert and Special Rapporteurs' reports are considered below.

The various reports of the abovementioned Independent Expert and Special Rapporteurs underscore the range of impacts environmental degradation can have on the enjoyment of human rights, and how essential it is to maintain a safe, clean, healthy and sustainable environment for the continued enjoyment of all human rights. The former Independent Expert has noted that environmental threats to human rights include the threat of hazardous wastes to the rights to life and health; the threat of climate change to the rights to life, health, food, water, housing and self-determination; the threats of environmental degradation, desertification and climate change to the right to food; and the threat of environmental degradation on indigenous peoples' rights to life and property.[74] Annual thematic reports of the Independent Expert and Special Rapporteurs have highlighted, among other things, the

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Environment (2012) 94-104; DK Anton & DL Shelton *Environmental Protection and Human Rights* (2011) 358-380, 443-457 & 487-519; U Beyerlin & T Marauhn *International Environmental Law* (2011) 393-402; UNEP *Compendium on Human Rights and the Environment: Selected International Legal Materials and Cases* (2014) 49-119; AC Kiss & D Shelton *International Environmental Law* 3 ed (2004) 692-703; P Sands *Principles of International Environmental Law* 2 ed (2003) 297-307.

[71] UNHRC *Human Rights and the Environment* (19 April 2012) A/HRC/RES/19/10. See also UNHRC *Human Rights and the Environment* (15 April 2014) HRC/RES/25/21.

[72] UNHRC *Human Rights and the Environment* (7 April 2015) A/HRC/RES/28/11. See also UNHRC *Human Rights and the Environment* (22 April 2016) A/HRC/RES/31/8; UNHRC *Human Rights and the Environment* (6 April 2017) A/HRC/RES/34/20.

[73] UNHRC *Human Rights and the Environment* (9 April 2018) A/HRC/RES/37/8.

[74] UNHRC *Report of the Independent Expert on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment, John H. Knox: Preliminary Report* (24 December 2012) A/HRC/22/43 para 19. See also UNHRC *Mapping Report* (2013) A/HRC/25/53 paras 19-25.

significant impacts that climate change, biodiversity and air quality have on various human rights.[75]

In addition to reiterating the impact of environmental harm on human rights, the reports of the Independent Expert and Special Rapporteurs have examined the range of procedural and substantive human rights obligations of states in relation to the environment. The procedural obligations which have been identified include duties to assess environmental impacts and make environment-related information public;[76] to facilitate public participation in environmental decision-making; [77] to provide access to effective remedies for environmental harm to human rights;[78] to protect the rights of expression and association, particularly of those seeking to defend their rights in relation to environmental concerns;[79] and, with regard to children's rights, to provide for environmental education and consideration of the views of children.[80] The Independent Expert and Special Rapporteur have also recognised a number of substantive obligations on states in relation to the environment. These substantive obligations include the obligation to "adopt legal and institutional frameworks that protect against, and respond to, environmental harm that may or does interfere with the enjoyment of human rights";[81] the obligation to protect against

[75] See UNHRC *Climate Change* (2016) A/HRC/31/52; UNHRC *Report of the Special Rapporteur on the Issue of Human Rights Obligations relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment: Biodiversity Report* (19 January 2017) A/HRC/34/49; UNHRC *Report of the Special Rapporteur on the Issue of Human Rights Obligations relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment: Clean Air* (8 January 2019) A/HRC/40/55.

[76] UNHRC *Mapping Report* (2013) A/HRC/25/53 paras 30-35; UNHRC *Report of the Independent Expert on the Issue of Human Rights Obligations relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment, John H. Knox: Compilation of Good Practices* (3 February 2015) A/HRC/28/61 paras 32-41; UNHRC *Climate Change* (2016) A/HRC/31/52 paras 51-55; UNHRC *Biodiversity Report* (2017) A/HRC/34/49 paras 27-30; UNHRC *Children's Rights and the Environment* (2018) A/HRC/37/58 paras 42-26; UNHRC *Report of the Special Rapporteur on the Issue of Human Rights Obligations relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment: Right to a Healthy Environment: Good Practices* (30 December 2019) A/HRC/43/53 para 14-21.

[77] UNHRC *Mapping Report* (2013) A/HRC/25/53 paras 36-40; UNHRC *Compilation of Good Practices* (2015) A/HRC/28/61 paras 42-49; UNHRC *Climate change* (2016) A/HRC/31/52 paras 56-61; UNHRC *Biodiversity Report* (2017) A/HRC/34/49 paras 27-30; UNHRC *Right to a Healthy Environment: Good Practices* (2019) A/HRC/43/53 para 22-29.

[78] UNHRC *Mapping Report* (2013) A/HRC/25/53 paras 41-43; UNHRC *Compilation of Good Practices* (2015) A/HRC/28/61 paras 55-71; UNHRC *Climate Change* (2016) A/HRC/31/52 paras 62-64; UNHRC *Biodiversity Report* (2017) A/HRC/34/49 paras 27-28; UNHRC *Children's Rights and the Environment* (2018) A/HRC/37/58 paras 51-54; UNHRC *Right to a Healthy Environment: Good Practices* (2019) A/HRC/43/53 para 30-37.

[79] UNHRC *Compilation of Good Practices* (2015) A/HRC/28/61 paras 50-54. See also UNHRC *Biodiversity Report* (2017) A/HRC/34/49 paras 31-32.

[80] UNHRC *Children's Rights and the Environment* (2018) A/HRC/37/58 paras 40-41 & 47-50.

[81] UNHRC *Mapping Report* (2013) A/HRC/25/53 para 47. See also UNHRC *Compilation of Good Practices* (2015) A/HRC/28/61 para 72; UNHRC *Climate Change* (2016) A/HRC/31/52 paras 65 & 68; UNHRC *Biodiversity Report* (2017) A/HRC/34/49 para 33.

activities by private actors which may cause environmental harm which threatens human rights;[82] and obligations related to transboundary harm and international cooperation.[83]

At this point it is necessary to note that in addition to the above obligations, States Parties have particular obligations towards indigenous peoples as well as towards peasants and other people working in rural areas, which have important implications for the relationship between these communities and the environment.[84] These are discussed separately below.

States Parties' obligations towards indigenous peoples have been underscored by the work of the former Special Rapporteur on the Rights of Indigenous Peoples, James Anaya.[85] The most prominent obligation in this regard is the requirement of free, prior and informed consent ("FPIC").[86] The most explicit recognition of FPIC is found in the 2007 UN Declaration on the Rights of Indigenous Peoples ("UNDRIP"),[87] although there are earlier references to the concept.[88] The UNDRIP affirms that FPIC must be obtained from affected indigenous peoples with regard to: relocation from their lands or territories;[89] legislative and administrative measures that may affect them;[90] the storage or disposal of hazardous waste in their lands or territories;[91] and the approval of any development project affecting their

[82] UNHRC *Mapping Report* (2013) A/HRC/25/53 para 58-61; UNHRC *Compilation of Good Practices* (2015) A/HRC/28/61 para 79-83; UNHRC *Biodiversity Report* (2017) A/HRC/34/49 para 33; UNHRC *Children's Rights and the Environment* (2018) A/HRC/37/58 paras 59-60.
[83] UNHRC *Mapping Report* (2013) A/HRC/25/53 para 62-68; UNHRC *Compilation of Good Practices* (2015) A/HRC/28/61 para 84-92; UNHRC *Climate Change* (2016) A/HRC/31/52 paras 41-48; UNHRC *Children's Rights and the Environment* (2018) A/HRC/37/58 para 61.
[84] See, generally, DK Anton & DL Shelton *Environmental Protection and Human Rights* (2011) 545-665.
[85] See, for example, UNHRC *Report of the Special Rapporteur on the Rights of Indigenous Peoples, James Anaya: Extractive Industries and Indigenous Peoples* (1 July 2013) A/HRC/24/41; UNHRC *Report of the Special Rapporteur on the Rights of Indigenous Peoples, James Anaya* (6 July 2012) A/HRC/21/47; UNHRC *Report of the Special Rapporteur on the Situation of Human Rights and Fundamental Freedoms of Indigenous People, James Anaya: Promotion and Protection of All Human Rights, Civil, Political, Economic, Social and Cultural Rights, including the Right to Development* (15 July 2009) A/HRC/12/34.
[86] See UNHRC *Extractive Industries and Indigenous Peoples* (2013) A/HRC/24/41 para 26-36; UNHRC *Report of the Special Rapporteur on the Rights of Indigenous Peoples* (2012) A/HRC/21/47 para 79-80; UNHRC *Promotion and Protection of All Human Rights, Civil, Political, Economic, Social and Cultural Rights, including the Right to Development* (2009) A/HRC/12/34 para 36-57; G Roller "Prior Informed Consent" in L Krämer & E Orlando (eds) *Principles of Environmental Law* (2018) 338 346-348; DK Anton & DL Shelton *Environmental Protection and Human Rights* (2011) 545-610. See also Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits arising from their Utilization to the Convention on Biological Diversity (adopted 29 October 2010, entered into force 20 January 2011) UNEP/CBD/COP/10/27 ("Nagoya Protocol") which refers to the notion of "prior informed consent" in the context of indigenous peoples and the fair and equitable sharing of benefits.
[87] UNGA *United Nations Declaration on the Rights of Indigenous Peoples* (2 October 2007) A/RES/61/295.
[88] See, for example, ILO Convention No 169 Concerning Indigenous and Tribal Peoples in Independent Countries (adopted 27 June 1989, entered into force 5 September 1991) 18 ILM 1382 para 7.
[89] UNGA *United Nations Declaration on the Rights of Indigenous Peoples* (2 October 2007) A/RES/61/295 article 10.
[90] UNGA *UNDRIP* article 19.
[91] UNGA *UNDRIP* article 29.

lands, territories or resources, including the exploitation of natural resources.[92] As a result of the nature of FPIC, environmental impact assessments ("EIAs") are particularly important where indigenous peoples might be affected as *informed* consent necessitates information regarding actual and potential impacts of the relevant activities.[93]

The position of indigenous peoples is also underscored in a 2020 report of the Special Rapporteur in the Field of Cultural Rights, Karima Bennoune.[94] The report discusses the relationship between cultural rights and climate change, emphasising that climate-related impacts on culture are particularly significant for indigenous peoples.[95] In addition to FPIC, it is important to note that the UNDRIP includes specific environment-related obligations. Article 29 of the UNDRIP establishes a right to "the conservation and protection of the environment and the productive capacity of [indigenous peoples'] lands or territories and resources".[96] States are required to "establish and implement assistance programmes" for this conservation and protection.[97]

The UN Declaration on Peasants and Other People Working in Rural Areas ("UNDROP")[98] imposes a number of environment-related obligations on states. These include procedural obligations such as the obligation to take measures to ensure that impact assessments, consultations and appropriate benefit-sharing agreements precede the exploitation of natural resources.[99] The substantive environment-related obligations include duties to formulate policies to advance and protect "sustainable and equitable food systems";[100] to take measures "aimed at the conservation and sustainable use of land and other natural resources";[101] to take appropriate measures to ensure the "conservation and sustainable use of biodiversity";[102] to protect and restore water-related ecosystems as well as to prioritise water use for human needs above other uses.[103]

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[92] UNGA *UNDRIP* article 32. See also UNHRC *Report of the Special Rapporteur on the Rights of Indigenous Peoples* (2012) A/HRC/21/47 para 79-80.
[93] N Craik "Environmental Impact Assessment" in L Krämer & E Orlando (eds) *Principles of Environmental Law* (2018) 195 204.
[94] UNGA *Report of the Special Rapporteur in the Field of Cultural Rights, Karima Bennoune* (10 August 2020) A/75/298.
[95] UNGA *Report of the Special Rapporteur in the Field of Cultural Rights* (2020) A/75/298 para 50-56. In addition to the rights of indigenous peoples set out in this section, see also Chapter 5, 5 2 1 in relation to the right of self-determination.
[96] UNGA *UNDRIP* article 29(1).
[97] Article 29(1).
[98] UNGA *United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas* (21 January 2019) A/RES/73/165.
[99] UNGA *UNDROP* article 5(2).
[100] Article 15(5).
[101] Article 17(7).
[102] Article 20(1).
[103] Article 21(4)-(5).

Significantly, article 18 of the UNDROP includes a right to the conservation and protection of the environment similar to that contained in article 29 of the UNDRIP. This includes an obligation on states to "take appropriate measures to ensure that peasants and other people working in rural areas enjoy, without discrimination, a safe, clean and healthy environment".[104] Article 18 also requires states to comply with international obligations with regard to climate change; to cooperate in addressing transboundary environmental harm; and to protect peasants and other people working in rural areas from abuse by non-state actors through the enforcement of relevant environmental laws.[105]

In addition to the various obligations outlined above, in 2018 the former Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, John Knox, presented his final report to the UNHRC, containing a set of Framework Principles on Human Rights and the Environment ("Framework Principles").[106] These principles "reflect the application of existing human rights obligations in the environmental context".[107] The Framework Principles underscore the interdependence of human rights and a safe, clean, healthy and sustainable environment.[108]

The Framework Principles reiterate a number of obligations identified in the Special Rapporteur's earlier reports, including obligations on states in relation to: non-discrimination,[109] access to information,[110] prior assessment,[111] public participation,[112] effective remedies,[113] and state cooperation in relation to transboundary and global environmental harm.[114] Principle 11 affirms that "States should establish and maintain substantive environmental standards that are non-discriminatory, non-retrogressive and otherwise respect, protect and fulfil human rights". This principle emphasises that environmental standards cannot infringe on human rights and must meet human rights standards. Principle 16 similarly asserts that "States should respect, protect and fulfil human

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[104] Article 18(2).
[105] Article 18(3)-(5).
[106] UNHRC *Report of the Special Rapporteur on the Issue of Human Rights Obligations relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment: Framework Principles* (24 January 2018) A/HRC/37/59.
[107] UNHRC *Framework Principles* (24 January 2018) A/HRC/37/59 para 8.
[108] Principle 1-2 & para 4-6.
[109] Principle 3 & 11.
[110] Principle 7.
[111] Principle 8.
[112] Principle 9.
[113] Principle 10.
[114] Principle 13.

rights in the actions they take to address environmental challenges and pursue sustainable development".

Finally, the Framework Principles highlight that special attention must be given to vulnerable groups as well as indigenous and traditional communities. Principle 14 requires states to "take additional measures to protect the rights of those who are most vulnerable to, or at particular risk from, environmental harm" and it is noted that those at risk include "women, children, persons living in poverty, members of indigenous peoples and traditional communities, older persons, persons with disabilities, ethnic, racial or other minorities and displaced persons".[115] In relation to indigenous peoples and members of traditional communities, Principle 15 underscores the existing obligations of states towards these groups, including the obligation of FPIC and fair and equitable benefit-sharing.[116]

There can therefore be no doubt that the environment has a significant impact on human rights and that states therefore have environment-related obligations under human rights law. As the work of the abovementioned special rapporteurs has highlighted, human rights obligations must be understood to include procedural and substantive environment-related obligations. This is fundamental to ensuring the protection of the environmental base upon which all human rights are founded. The section below considers economic, social and cultural rights ("ESCRs") in particular and the extent to which the Committee has recognised environmental impacts and obligations in relation to the Covenant.

2 3 Economic, social and cultural rights and the environment under the Covenant

2 3 1 Introduction

Although it is clear that the condition of the environment impacts most, if not all, human rights, a number of Covenant rights rely directly on the environment and natural resources for their realisation. These rights include the rights to health, housing, water, food, and safe and healthy working conditions, as well as cultural rights. These rights have underlying environmental determinants and therefore depend heavily on natural resources and a healthy environment for their fulfilment. In relation to the right to an adequate standard of living, for example, UNEP has noted the following:

> "[The] components of the right to an adequate standard of living are linked to environmental protection. Realization of the right to food is closely tied to environmental factors such as water, climate, soil quality, air quality, and biological diversity. Pollution and land degradation can impact the right to housing through rendering existing or potential residential areas

[115] UNHRC *Framework Principles* (24 January 2018) A/HRC/37/59 para 41.
[116] Principle 15(a)-(d).

> uninhabitable. At the same time, inadequate housing can leave individuals more vulnerable to environmental threats such as pollution, natural disasters, and low temperatures".[117]

While the obligations of states in relation to the environment and ESCRs are encompassed in the duties identified by the special rapporteurs above, many of these obligations have also been considered independently, in particular by the Committee itself.

Before turning to the environment-related obligations identified in the context of the Covenant, it is useful to note that States Parties' obligations under the Covenant differ from those in the International Covenant on Civil and Political Rights ("ICCPR")[118] in certain key respects. The obligations in the ICCPR are not subject to the qualifying concepts of maximum available resources and progressive realisation that are found in the Covenant. Article 2 of the Covenant refers to, among other things, the State Party's obligation to take steps "to the maximum of its available resources, with a view to achieving progressively the full realization of the rights recognized in [the Covenant]".[119] These concepts have important implications for how the environment-related obligations in the Covenant are interpreted. For example, the condition and extent of a State Party's national water resources (as well as the state of the environment as it affects the quality of those resources) will form part of the "available resources" to be used for the realisation of the right to water.

Although numerous threats to the environment have been outlined above, it is important to note that the rights in the Covenant remain fundamental and binding in the face of environmental challenges. States Parties may not use the climate crisis or environmental degradation as a justification for failing to comply with their human rights obligations in the name of environmental protection. In a 2009 UNHRC report on the relationship between climate change and human rights, it was noted that the impacts of climate change should not be used to flout ESCRs:

> "[I]rrespective of the additional strain climate change-related events may place on available resources, States remain under an obligation to ensure the widest possible enjoyment of economic, social and cultural rights under any given circumstances. Importantly, States must, as a matter of priority, seek to satisfy core obligations and protect groups in society who are in a particularly vulnerable situation".[120]

Any measures taken to address the climate crisis must therefore safeguard ESCRs, and protect ESCRs from the impacts of climate change wherever possible.[121] In his report on

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[117] UNEP *UNEP Compendium on Human Rights and the Environment* 13.
[118] International Covenant on Civil and Political Rights (adopted 16 December 1966, entered into force 23 March 1976) 999 UNTS 171 article 2.
[119] ICESCR article 2.
[120] UNHRC *Report of the Office of the United Nations High Commissioner for Human Rights on the Relationship between Climate Change and Human Rights* (15 January 2009) A/HRC/10/61 para 77.
[121] See UNHRC *Climate Change and Poverty* (2019) A/HRC/41/39 para 78.

climate change and poverty, the former Special Rapporteur on Extreme Poverty and Human Rights underscored the importance of ESCRs, noting that "[a]s people's access to food, land, water, health care, housing, and education are threatened or destroyed, there will be an ever-greater need for principled policies that ensure respect for economic and social rights".[122]

As is evidenced by the latter quote, cultural rights are often overlooked in relation to the impacts of climate change and environmental degradation. The Special Rapporteur in the Field of Cultural Rights, Karima Bennoune draws attention to the impacts of climate change on cultural rights more broadly, noting that "cultural rights are particularly drastically affected, in that they risk being simply wiped out in many cases"[123] and that entire nations face "the threat of cultural extinction".[124] Despite this, these rights have received insufficient attention.[125] As with other climate change impacts, the consequences for cultural rights have a disproportionate effect on those "with pronounced cultural connections to land, sea, natural resources and ecosystems, including indigenous, rural and fisher peoples".[126] The Special Rapporteur in the Field of Cultural Rights thus concludes that States have an obligation to "[t]ake cultural rights and cultural impacts into consideration in responding to all aspects of climate change and in climate action".[127]

ESCRs are the subject of a report of the UN Secretary-General in relation to the implementation of the 2030 Agenda for Sustainable Development ("the 2030 Agenda").[128] The procedural obligations identified by the special rapporteurs above are echoed in this report.[129] In addition to appropriate legal and institutional frameworks, the substantive obligations identified include obligations with regard to equality and non-discrimination, particularly in the case of vulnerable populations.[130] It is noted, for example, that natural hazards do not necessarily constitute disasters, but can become disasters due to "the multiple and complex interplay between the exposure, vulnerability and resilience of individuals and communities".[131] Significantly, the realisation of ESCRs is recognised as an

[122] UNHRC *Climate Change and Poverty* (2019) A/HRC/41/39 para 67.
[123] UNGA *Report of the Special Rapporteur in the Field of Cultural Rights* (2020) A/75/298 para 2.
[124] Para 37. The report notes that this is particularly the case for small island states and low-lying areas.
[125] Para 14.
[126] Para 7.
[127] Para 81(c).
[128] UNHRC *The Role of ESCR in Building Sustainable and Resilient Societies* (2017) A/HRC/37/30.
[129] UNHRC *The Role of ESCR in Building Sustainable and Resilient Societies* (2017) A/HRC/37/30 para 32. See 2 2 2 above.
[130] Para 32.
[131] Para 56.

important contributor to the resilience and sustainability of societies.[132] The report notes that states are required to ensure that the level of enjoyment of ESCRs does not deteriorate, obliging States Parties to take preventative action against the effects of natural disasters and climate change.[133]

Turning to the CESCR, it is important to note that the Committee is well-positioned to address the threat of environmental harm and urge States Parties to ensure that such harm is prevented. Voigt and Grant note that human rights tribunals typically respond to environment-related human rights violations when affected groups and individuals seek remedies after the fact, explaining that "human rights systems tend to take a reactive approach to environmental harm".[134] While the Committee is in a position to react to environmental harm after the fact, particularly through its views under the Optional Protocol and concluding observations, it is also in a position to recommend action related to environmental protection before harm occurs. Through issuing general comments and statements the Committee is able to recognise environment-related obligations prior to the occurrence of the harm. It is also able to do so with respect to its concluding observations on States Parties' reports as the Committee's recommendations in this regard are not dependent on responding to, or establishing, an existing violation. The Committee is therefore well-placed to promote environmental protection and related preventative measures where they are relevant for Covenant obligations.

The CESCR has addressed the relationship between the Covenant and the environment on a number of occasions.[135] As will be seen below, the Committee's references to environmental considerations (including climate change) have increased in recent years and the Committee has demonstrated a growing awareness of the critical relationship between the environment and the rights and obligations in the Covenant. The Committee is increasingly willing to require States Parties to consider the impact of the environment on ESCRs and to include environment-related obligations within the scope of the Covenant. The Committee's references to the environment and environment-related considerations are discussed below with reference to its official statements, general comments and concluding

[132] UNHRC *The Role of ESCR in Building Sustainable and Resilient Societies* (2017) A/HRC/37/30 para 57.
[133] Para 31.
[134] C Voigt & E Grant "Editorial: The Legitimacy of Human Rights Courts in Environmental Disputes" (2015) 6 *JHRE* 131 134.
[135] Many aspects of the Committee's work in relation to the environment have been captured in a mapping report prepared in terms of the special procedures of the UN Human Rights Council for the Independent Expert on the Issue of Human Rights Obligations relating to the Enjoyment of a Safe, Clean, Healthy, and Sustainable Environment. See OHCHR *Mapping Human Rights Obligations relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment: Individual Report on the International Covenant on Economic, Social and Cultural Rights* (December 2013).

observations. As noted above, it is possible, and perhaps inevitable, that environmental considerations will form part of the Committee's evolving jurisprudence under the Optional Protocol to the ICESCR.[136] However, the subject matter of the complaints received thus far has not included factors directly related to the environment, natural resources or climate change. The Committee's views under the Optional Protocol are therefore not discussed separately.

2 3 2 The Committee's statements

One of the Committee's earliest references to environmental considerations is in a statement adopted in 1999 to the Third Ministerial Conference of the World Trade Organization ("WTO").[137] The Committee urged the WTO to review international trade and investment policies and rules, and to ensure these are consistent with human rights and that they "address as a matter of highest priority the impact of WTO policies on the most vulnerable sectors of society as well as on the environment".[138] In 2002 the Committee issued a statement highlighting the importance of including human rights in discussions concerning sustainable development at the World Summit on Sustainable Development held at Johannesburg in the same year.[139] A 2008 statement on the world food crisis recognised the influence of climate change and urged States Parties to promote sustainable agriculture and ensure that strategies to combat climate change are not detrimental to the right to adequate food and freedom from hunger.[140] In 2012, in anticipation of the Rio+20 Conference, the Committee adopted a statement on "the green economy in the context of sustainable development and poverty eradication".[141] This statement affirmed the interlinkages of ESCRs and "the sustainability of environmental protection" and highlighted, among other things, certain obligations relating to the environment that flow from the rights in the Covenant.[142] The obligations identified include the obligations to ensure a healthy

[136] Optional Protocol to the International Covenant on Economic, Social and Cultural Rights (adopted 10 December 2008, entered into force 5 May 2013) A/RES/63/117. See Chapter 1, 1 4 and 1 5 3.
[137] CESCR *Statement to the Third Ministerial Conference of the World Trade Organization (Seattle, 30 November to 3 December 1999)* (26 November 1999) E/C12/1999/9. See Chapter 1, 1 5 3 and Chapter 3, 3 3 4 1 in relation to the status of the Committee's statements.
[138] CESCR *Statement to the Third Ministerial Conference of the World Trade Organization (Seattle, 30 November to 3 December 1999)* (26 November 1999) E/C12/1999/9 para 2.
[139] CESCR *Statement of the Committee on Economic, Social and Cultural Rights to the Commission on Sustainable Development acting as the Preparatory Committee for the World Summit on Sustainable Development (Bali, Indonesia, 27 May to 7 June 2002)* (17 May 2002) E/C12/2002/13 annex VI.
[140] CESCR *Statement on World Food Crisis* (19 May 2008) E/C12/2008/1 para 13.
[141] CESCR *Statement in the Context of the Rio+20 Conference on "The Green Economy in the Context of Sustainable Development and Poverty Eradication"* (4 June 2012) E/C12/2012/1.
[142] CESCR *Statement in the Context of the Rio+20 Conference* para 5.

working environment;[143] to avoid adverse environmental impacts on the right to food;[144] and to ensure conservation and sustainable use of natural resources which serve as elements of the right to health.[145] The statement also recognises the relationship between biodiversity and the promotion of health (through advancing pharmacology and medicine) as well as the relationship between biodiversity and cultural rights (through the rights of indigenous peoples and the protection of traditional knowledge).[146]

The Committee's later statements include a 2018 statement on climate change and a 2019 statement on the 2030 Agenda. [147] The statement on climate change and the Covenant was adopted shortly after the publication of the IPCC report on the impacts of global warming of 1.5°C above pre-industrial levels.[148] The statement serves as a reminder to states that, apart from commitments made under the climate change regime, they have human rights obligations "which should guide them in the design and implementation of measures to address climate change".[149] The Committee emphasised that failing to prevent foreseeable harm from climate change or "to mobilize the maximum available resources in an effort to do so" could amount to a violation of the obligation to "respect, protect and fulfil all human rights for all".[150] It observed, for example, that many of the nationally determined contributions under the Paris Agreement were insufficient to be considered consistent with States Parties' human rights obligations under the Covenant.[151] The Committee has also issued a joint statement with other human rights treaty bodies in relation to human rights and climate change. The latter statement recognises the "damage suffered by ecosystems, which in turn affect the enjoyment of human rights".[152] The joint statement also emphasises

[143] CESCR *Statement in the Context of the Rio+20 Conference* para 6(c).
[144] Para 6(d).
[145] Para 6(e).
[146] Para 6(f).
[147] CESCR *Climate Change and the International Covenant on Economic, Social and Cultural Rights* (31 October 2018) E/C12/2018/1; CESCR *The Pledge to Leave No One Behind: The International Covenant on Economic, Social and Cultural Rights and the 2030 Agenda for Sustainable Development* (5 April 2019) E/C12/2019/1.
[148] V Masson-Delmotte, P Zhai, H Pörtner, D Roberts, J Skea, P Shukla, A Pirani, W Moufouma-Okia, C Péan, R Pidcock, S Connors, J Matthews, Y Chen, X Zhou, M Gomis, E Lonnoy, T Maycock, M Tignor & T Waterfield (eds) *Global Warming of 1.5°C: An IPCC Special Report* (2018); CESCR *Climate Change and the ICESCR* para 1.
[149] CESCR *Climate Change and the ICESCR* para 3.
[150] Paras 5-6.
[151] Para 6.
[152] See CERD, CESCR, CMW, CRC & CRPD *Statement on Human Rights and Climate Change: Joint statement by the Committee on the Elimination of Discrimination against Women, the Committee on Economic, Social and Cultural Rights, the Committee on the Protection of the Rights of All Migrant Workers and Members of Their Families, the Committee on the Rights of the Child and the Committee on the Rights of Persons with Disabilities* (14 May 2020) HRI/2019/1 para 3. See para 3-6 on the impacts on climate change on human rights.

the disproportionate impact of climate change on those individuals and groups who are already disadvantaged or marginalised.[153]

The Committee's 2019 statement in relation to the 2030 Agenda focuses on the pledge to leave no one behind, which the Committee describes as "a commitment by States to prioritize the needs of the most disadvantaged and marginalized in realizing the Sustainable Development Goals".[154] The statement recognises the discrimination and disadvantage experienced by, among others, "nations and communities vulnerable to climate change and environmental pollution and degradation".[155] The Committee also notes that methods used to fulfil the rights in the Covenant should be sustainable "so as to ensure that the rights are secured both for present and future generations".[156] The statement demonstrates that compliance with the obligations of the Covenant will strengthen States in their pursuit of the SDGs and the pledge to leave no one behind.[157]

2 3 3 General comments

The Committee's general comments also contain references to the environment and environmental considerations.[158] The general comments refer to the following: the climatic and ecological conditions that influence the notion of adequacy in the enjoyment of Covenant rights;[159] sustainability and the needs of future generations;[160] the concept of a healthy environment;[161] biodiversity as a cultural resource;[162] respect for the relationship between indigenous peoples and nature;[163] the assessment of potential environmental

[153] CERD, CESCR, CMW, CRC & CRPD *Joint Statement on Human Rights and Climate Change* para 3.
[154] CESCR *The Pledge to Leave No One Behind: The ICESCR and the 2030 Agenda* para 6.
[155] Para 8.
[156] Para 12(e).
[157] CESCR *The Pledge to Leave No One Behind: The ICESCR and the 2030 Agenda* paras 18 & 20.
[158] See Chapter 1, 1 5 3 and Chapter 3, 3 3 4 1 on the status of the Committee's general comments.
[159] CESCR *General Comment No 4: The Right to Adequate Housing (Art 11 (1) of the Covenant)* (13 December 1991) E/1992/23 para 8; CESCR *General Comment No 12: The Right to Adequate Food (Art 11 of the Covenant)* (12 May 1999) E/C12/1999/512 para 7. See also D Shelton, "Human Rights and the Environment: What Specific Environmental Rights Have Been Recognized?" (2006) 35 *DJILP* 129 151.
[160] CESCR *General Comment 4* para 8; CESCR *General Comment No 12* para 7; CESCR *General Comment No. 15: The Right to Water (Arts. 11 and 12 of the Covenant)* (20 January 2003) E/C12/2002/11 para 28; CESCR *General Comment No 25 on Science and Economic, Social and Cultural Rights* (Art 15(1)(b), 15(2), 15(3) and 15(4)) (7 April 2020) E/C12/GC/25 para 56. See also Shelton (2006) *DJILP* 151.
[161] CESCR *General Comment No 14: The Right to the Highest Attainable Standard of Health (Art 12 of the Covenant)* (11 August 2000) E/C12/2000/4 para 4. See also CESCR *General Comment No 22: The Right to Sexual and Reproductive Health (Article 12 of the Covenant)* (2 May 2016) E/C12/GC/22 para 7. It is important to note that the latter general comment refers to "safe and healthy working conditions and environment", and the intended meaning may therefore be limited to a healthy *working* environment.
[162] CESCR *General Comment No 21: The Right of Everyone to Take Part in Cultural Life (Art 15, para 1(a) of the Covenant)* (21 December 2009) E/C12/GC/21 para 15(b).
[163] CESCR *General Comment No 21* para 36.

impacts;[164] the prohibition of transboundary environmental harm;[165] and the avoidance of unacceptable harm to the environment.[166] On the whole these references are in brief, general terms and require greater elaboration if the environmental dimensions of the relevant rights are to be appropriately integrated in the Covenant.

General Comment 15 on the right to water is an exception in that it provides a more detailed and practical indication of what is expected of States Parties.[167] According to the Committee, the right to water includes the following obligations:

> "States parties should adopt comprehensive and integrated strategies and programmes to ensure that there is sufficient and safe water for present and future generations. Such strategies and programmes may include: (a) reducing depletion of water resources through unsustainable extraction, diversion and damming; (b) reducing and eliminating contamination of watersheds and water-related ecosystems by substances such as radiation, harmful chemicals and human excreta; (c) monitoring water reserves; (d) ensuring that proposed developments do not interfere with access to adequate water; (e) assessing the impacts of actions that may impinge upon water availability and natural ecosystems watersheds, such as climate changes, desertification and increased soil salinity, deforestation and loss of biodiversity; (f) increasing the efficient use of water by end-users; (g) reducing water wastage in its distribution; (h) response mechanisms for emergency situations; (i) and establishing competent institutions and appropriate institutional arrangements to carry out the strategies and programmes".[168]

These obligations go beyond the mere provision of water by giving due consideration to the underlying environmental factors that influence a State Party's ability to fulfil the right to water. The Committee therefore recognises, for example, that water resources are connected to natural ecosystems and biodiversity; and that preventing contamination and ensuring the sustainable use of water resources is essential in order to fulfil the right to water. While the above description of the obligations under the right to water in General Comment 15 is more detailed, the environmental dimensions of States Parties' obligations under the rest of the Covenant are not identified as explicitly.

While the reference to environmental considerations in general comments is often cursory and with little substantive elaboration, it is noteworthy that two of the Committee's recent general comments make explicit reference to principles of environmental law. The principles referred to are the prohibition of transboundary harm[169] and the precautionary principle.[170]

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[164] CESCR *General Comment No 24: State Obligations under the International Covenant on Economic, Social and Cultural Rights in the Context of Business Activities* (10 August 2017) E/C12/GC/24 para 18 & 50.
[165] CESCR *General Comment No 24* para 27.
[166] CESCR *General Comment No 25* para 56.
[167] CESCR *General Comment No 15* para 28. See also Shelton (2006) *DJILP* 152-153; Beyerlin & Marauhn *International Environmental Law* 393-394.
[168] CESCR *General Comment No 15* para 28.
[169] CESCR *General Comment No 24* para 27. See also Chapter 4, 4 3 2 2 and Chapter 7, 7 3 3 in relation to the no-harm principle.
[170] CESCR *General Comment No 25* para 56. The precautionary principle is discussed further at Chapter 4, 4 3 2 4 and Chapter 7, 7 3 5.

As this dissertation argues, the incorporation of existing principles of IEL can assist in providing meaningful guidance for States Parties with respect to environment-related obligations.

2 3 4 Concluding observations

The Committee's concluding observations on States Parties' reports, under the periodic reporting procedure in terms of articles 16 and 17 of the Covenant, similarly take note of environmental factors in some cases.[171] It is apparent that references to environmental issues in the Committee's concluding observations are rapidly increasing in both frequency and scope. The Committee has demonstrated an understanding of the interrelatedness of human rights and the environment and a readiness to acknowledge the need for an interpretation of the Covenant that incorporates environmental factors. This is evident, for example, in the Committee's recognition of the adverse impacts of climate change on the enjoyment of ESCRs[172] and its express concern where domestic environmental protections have diminished.[173]

Many of the Committee's environment-related concerns in its concluding observations are associated with climate change. Early references to climate change in the Committee's concluding observations began with, for example, welcoming the adoption by a State Party of the United Nations Framework Convention on Climate Change ("UNFCCC")[174] and the pursuit of projects under the UNFCCC's Clean Development Mechanism and Reducing Emissions from Deforestation and Forest Degradation ("REDD") Programme.[175] By 2009 the Committee's concluding observations had only referred to climate change on three occasions.[176] Recent treatment of climate change is more frequent and includes greater specificity and scope. In relation to States Parties' contributions to climate change, the Committee's recommendations have covered the reduction of GHG emissions;[177] pursuit of

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[171] See Chapter 1, 1 5 3 and Chapter 3, 3 3 4 1 on the status of the Committee's concluding observations.
[172] CESCR *Concluding Observations, Australia* (12 June 2009) E/C12/AUS/CO/4 para 27; CESCR *Concluding Observations, Finland* (17 December 2014) E/C12/FIN/CO/6 para 9; CESCR *Concluding Observations, Canada* (23 March 2016) E/C12/CAN/CO/6 para 53; CESCR *Concluding Observations, Australia* (11 July 2017) E/C12/AUS/CO/5 para 12; CESCR *Concluding Observations, Russian Federation* (6 October 2017) E/C12/RUS/CO/6 para 42; CESCR *Concluding Observations, Bangladesh* (18 April 2018) E/C12/BGD/CO/1 para 13.
[173] CESCR *Canada* (2016) para 53; CESCR *Australia* (2017) para 11.
[174] CESCR *Concluding Observations, Ukraine* (4 January 2008) E/C12/UKR/CO/5 para 4.
[175] CESCR *Concluding Observations, Cambodia* (12 June 2009) E/C12/KHM/CO/1 para 7.
[176] CESCR *Ukraine* (2008) para 4; CESCR *Australia* (2009) 27; CESCR *Cambodia* (2009) para 7. See M Orellana, M Kothari & S Chaudhry "Climate Change in the Work of the Committee on Economic, Social and Cultural Rights" (03-05-2010) *CIEL* <https://www.ciel.org/Publications/CESCR_CC_03May10.pdf> (accessed 04-09-2019) 22.
[177] CESCR *Australia* (2009) para 27; CESCR *Australia* (2017) para 12; CESCR *Russian Federation* (2017) para 43. CESCR *Concluding Observations, Argentina* (1 November 2018) E/C12/ARG/CO/4 para 14; CESCR

renewable energy;[178] cessation of support for new coal operations;[179] and revised climate change policies.[180] The Committee has also recommended action in relation to the impacts of climate change, particularly regarding the rights of indigenous peoples.[181] This range of recommendations includes "addressing" climate change impacts;[182] mitigating impacts;[183] monitoring climate change and its impacts;[184] and providing information on climate change and its impacts on ESCRs to those affected.[185] It is worth noting that the Committee's concerns regarding climate change have focused primarily on developed states and their contributions to climate change.[186] In its concluding observations on Mauritius the Committee has also encouraged the State Party to "strengthen the preparedness" of communities prone to natural disasters and the impacts of climate change, and has urged the State Party to seek international support in order to respond to climate change and its effects.[187] The Committee is placing an increasing emphasis on climate change evidenced, for example, by the fact that 42 percent of its 2018 concluding observations contained references to climate change.[188]

The Committee has also welcomed efforts by States Parties to protect the environment through legislative and other means.[189] In relation to the right to food, the Committee recommended that the State Party of Guinea "[b]uild the resilience of agriculture to environmental shocks".[190] The Committee has also expressed concern over the activities of

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Concluding Observations, Germany (27 November 2018) E/C12/DEU/CO/6 para 19; CESCR *Concluding Observations, Switzerland* (18 November 2019) E/C12/CHE/CO/4 para 18-19; CESCR *Concluding Observations, Ecuador* (14 November 2019) E/C12/ECU/CO/4 para 12; CESCR *Concluding Observations, Belgium* (26 March 2020) E/C12/BEL/CO/5 para 9-10; CESCR *Concluding Observations, Norway* (2 April 2020) E/C12/NOR/CO/6 para 10-11.

[178] CESCR *Canada* (2016) para 54; CESCR *Australia* (2017) para 12; CESCR *Argentina* (2018) para 14. CESCR *Ecuador* (2019) para 12; CESCR *Norway* (2020) para 11.

[179] CESCR *Australia* (2017) para 12.

[180] CESCR *Australia* (2017) para 12; CESCR *Concluding Observations, New Zealand* (1 May 2018) E/C12/NZL/CO/4 para 9.

[181] CESCR *Australia* (2017) para 11 recognises that climate change has a disproportionate impact on indigenous peoples.

[182] CESCR *Finland* (2014) para 9; CESCR *Canada* (2016) para 54; CESCR *Australia* (2017) para 12; CESCR *Australia* (2009) para 27.

[183] CESCR *Australia* (2009) para 27; CESCR *Bangladesh* (2018) para 14; CESCR *Concluding Observations, Cabo Verde* (27 November 2018) E/C12/CPV/CO/1 paras 8-9.

[184] CESCR *Russian Federation* (2017) para 43.

[185] CESCR *Russian Federation* (2017) para 43.

[186] S Duyck & L McKernan *States' Human Rights Obligations in the Context of Climate Change: Synthesis Note on the Concluding Observations and Recommendations on Climate Change adopted by UN Human Rights Treaty Bodies* (2018) 7. Duyck and McKernan note that the CESCR is the only human rights treaty body to focus on the most industrialised countries with regard to climate-related obligations.

[187] CESCR *Concluding Observations, Mauritius* (5 April 2019) E/C12/MUS/CO/5 paras 9-10.

[188] UNHRC *Climate Change and Poverty* (2019) A/HRC/41/39 para 21.

[189] CESCR *Concluding Observations, Philippines* (1 December 2008) E/C12/PHL/CO/4 para 9; CESCR *Concluding Observations, Bolivia* (8 August 2008) E/C12/BOL/CO/2 para 9.

[190] CESCR *Concluding Observations, Guinea* (30 March 2020) E/C12/GIN/CO/1 para 40(c).

private actors which have a detrimental impact on land and natural resources, particularly extractive industries and logging operations, with an emphasis on the impacts on indigenous peoples.[191] In relation to Ecuador, for example, the Committee has noted its concern regarding detrimental health and environmental impacts of extractive activities "at the expense of the exercise of land and culture rights of the affected indigenous communities and the equilibrium of the ecosystem".[192] The Committee has recommended consultation and engagement with affected communities; the guarantee of FPIC by indigenous communities; as well as compensation for loss and a share of the profits for affected communities from the exploitation of natural resources.[193] Regarding the financial benefit of exploiting natural resources, it has also been recommended that fees charged to foreign investors for such activities should be increased in order to effectively mobilise domestic resources for the progressive realisation of ESCRs.[194] Similarly, in its concluding observations regarding Mali, the Committee has recommended the review of tax exemptions granted for the exploitation of natural resources "with a view to raising the level of public spending for the progressive realization of economic, social and cultural rights".[195]

The Committee has also recommended that EIAs be required before potentially harmful activities are undertaken;[196] that they take into account the need for sustainable development;[197] that they are subject to independent review;[198] and, in the case of hydraulic fracturing, that an appropriate regulatory framework is developed including documentation of the range of impacts and threats associated with the activity.[199] Most recently, the

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[191] CESCR *Concluding Observations, Russian Federation* (20 May 1997) E/C12/1/Add13 para 14; CESCR *Concluding Observations, Nigeria* (16 June 1998) E/C12/1/Add23 para 29; CESCR *Concluding Observations, Venezuela* (21 May 2001) E/C12/1/Add.56 para 12; CESCR *Finland* (2014) para 9; CESCR *Canada* (2016) para 53; CESCR *Concluding Observations, Philippines* (26 October 2016) E/C12/PHL/CO/5-6 para 13; CESCR *Australia* (2017) para 15; CESCR *Russian Federation* (2017) para 14; CESCR *Concluding Observations, Colombia* (19 October 2017) E/C12/COL/CO/6 para 15. CESCR *Concluding Observations, Mali* (6 November 2018) E/C12/MLI/CO/1 paras 43-44; CESCR *Argentina* (2018) para 18; CESCR *Guinea* (2020) para 16-17.

[192] CESCR *Concluding Observations, Ecuador* (7 June 2004) E/C12/1/Add100 para 12. See also CESCR *Ecuador* (2019) para 15-16, 53-54 & 61-62.

[193] CESCR *Ecuador* (2004) para 35; CESCR *Concluding Observations, Mexico* (9 June 2006) E/C12/MEX/CO/4 para 10; CESCR *Cambodia* (2009) para 15; CESCR *Russian Federation* (2017) para 15; CESCR *Australia* (2017) para 16; CESCR *Philippines* (2016) para 14; CESCR *Canada* (2016) para 14. CESCR *New Zealand* (2018) para 9; CESCR *Mali* (2018) paras 43-44; CESCR *Concluding Observations, Cameroon* (25 March 2019) E/C12/CMR/CO/4 paras 16-17; CESCR *Ecuador* (2019) para 16; CESCR *Guinea* (2020) para 17.

[194] CESCR *Cameroon* (2019) paras 14-15; CESCR *Concluding Observations, Senegal* (13 November 2019) E/C12/SEN/CO/3 para 11.

[195] CESCR *Mali* (2018) para 13.

[196] CESCR *Cambodia* (2009) paras 15-16; CESCR *Canada* (2016) para 54; CESCR *Russian Federation* (2017) para 15; CESCR *New Zealand* (2018) para 9; CESCR *Cameroon* (2019) paras 16-17; CESCR *Guinea* (2020) para 17(b).

[197] CESCR *Cambodia* (2009) para 15.

[198] CESCR *Concluding Observations, Honduras* (21 May 2001) E/C12/1/Add.57 paras 24 & 46.

[199] CESCR *Argentina* (2018) para 58.

Committee has recommended that human rights and environmental impact assessments also be conducted prior to investment and trade agreements.[200] The Committee has also noted its concern regarding pollution and contamination on a number of occasions, most commonly in relation to water resources.[201] Some of the Committee's later concluding observations have expressed its concern with growing instances of threats, harassment and violence against human rights defenders in the environmental sector, encouraging the investigation of such cases.[202]

In addition to the above references made by the Committee in relation to individual state reports, since 2016 the Committee's concluding observations have included a standard paragraph referring to the 2030 Agenda and the SDGs. The Committee encourages States Parties to take the obligations under the Covenant into account when implementing the goals.[203] This emphasises the role of the binding obligations in Covenant in achieving the SDGs which are "integrated and indivisible and balance the three dimensions of sustainable development: the economic, social and environmental".[204] Although this does not necessarily require an integration of environmental dimensions into the Covenant itself, it does encourage States Parties to consider their commitments under the SDGs, which include environmental components.[205]

2 3 5 The need for a more systematic approach

It is clear that the Committee has "firmly established that the enjoyment of several economic, social and cultural rights depends upon the existence of a healthy

[200] CESCR *Concluding Observations, Kazakhstan* (29 March 2019) E/C12/KAZ/CO/2 para 17(e). See also CESCR *Guinea* (2020) para 17(b).
[201] CESCR *Russian Federation* (1997) paras 14, 24 & 38; CESCR *Concluding Observations, Moldova* (19 October 2017) E/C12/MDA/CO/3 para 68; CESCR *Concluding Observations, Mexico* (17 April 2018) E/C12/MEX/CO/5-6 para 57; CESCR *Bangladesh* (2018) para 64; CESCR *Colombia* (2017) para 59; CESCR *Concluding Observations, Republic of Korea* (19 October 2017) E/C12/KOR/CO/4 para 50; CESCR *Concluding Observations, Niger* (4 June 2018) E/C12/NER/CO/1 2018 para 17; CESCR *Concluding Observations, The Netherlands* (23 June 2017) E/C12/NLD/CO/6 para 11; CESCR *Argentina* (2018) para 58; CESCR *Mali* (2018) para 44; CESCR *Concluding Observations, Estonia* (27 March 2019) E/C12/EST/CO/3 paras 40-41; CESCR *Senegal* (2019) para 34-35; CESCR *Guinea* (2020) para 17(d).
[202] CESCR *Argentina* (2018) para 17; CESCR *Concluding Observations, South Africa* (29 November 2018) E/C12/ZAF/CO/1 paras 12-13; CESCR *Ecuador* (2019) para 13-14.
[203] See for example, CESCR *Philippines* (2016) para 61; CESCR *Australia* (2017) para 61; CESCR *Russian Federation* (2017) para 62. CESCR *New Zealand* (2018) para 53; *Niger* (2018) para 53; CESCR *Mexico* (2018) para 73; CESCR *Bangladesh* (2018) para 74; CESCR *Cameroon* (2019) para 68; CESCR *Concluding Observations, Denmark* (12 November 2019) E/C12/DNK/CO/6 para 75; CESCR *Guinea* (2020) para 50; CESCR *Norway* (2020) para 48.
[204] UNGA *Transforming Our World: The 2030 Agenda for Sustainable Development* (21 October 2015) A/RES/70/1 preamble.
[205] For example, the SDGs of particular relevance to the environment include those concerning responsible consumption and production (SDG 12); climate action (SDG 13); life below water (SDG 14); and life on land (SDG 15).

environment".[206] The Committee should be applauded for its willingness to address environmental concerns as they relate to the rights in the Covenant. Duyck and McKernan note that, compared to other human rights treaty bodies, the Committee has been more vocal about the important relationship between indigenous rights and climate change, as well as about the need for climate change mitigation.[207] Similarly, in relation to climate change, the former Special Rapporteur on Extreme Poverty and Human Rights, Philip Alston, noted that the Committee "has produced the most extensive and focused response to date" through its 2018 statement on climate change and the Covenant.[208] However, the Special Rapporteur has also shown that of the three most engaged treaty bodies, "just 9 percent of references to climate change since 2008 have dealt with mitigation, the issue of greatest importance for reversing the current trajectory".[209] The Special Rapporteur's report on climate change and poverty suggests that greater clarity and specificity is required in interpreting and articulating the obligations of States Parties in relation to climate change, emphasising the need for "detailed, actionable recommendations"[210] and "meaningful guidance as to the measures needed, or at least as to the procedures that might be adopted".[211] The Special Rapporteur also warns that treaty bodies must be careful of terms that are "so open-ended and non-specific" that States Parties are required to do "little more than ticking the climate change box".[212] The report notes that each human rights body should consider how it can "highlight the urgency of the obligation to combat climate change" through its existing processes.[213]

It is evident that the Committee has likely surpassed most other human rights treaty bodies in its progressive inclusion of environmental considerations. While this is certainly commendable, a more detailed and systematic approach to the environmental dimensions

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[206] OHCHR *Mapping Human Rights Obligations relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment: Individual Report on the International Covenant on Economic, Social and Cultural Rights* (December 2013) para 104.
[207] Duyck & McKernan "*States' Human Rights Obligations in the Context of Climate Change: Synthesis Note on the Concluding Observations and Recommendations on Climate Change adopted by UN Human Rights Treaty Bodies* (2018) 6.
[208] UNHRC *Climate Change and Poverty* (2019) A/HRC/41/39 para 21.
[209] UNHRC *Climate Change and Poverty* (2019) A/HRC/41/39 para 23. The Special Rapporteur does recognise that the CESCR has "pushed developing countries to seek assistance" but notes that the responsibility of wealthier countries remains undetermined. See also Duyck & McKernan *States' Human Rights Obligations in the Context of Climate Change: Synthesis Note on the Concluding Observations and Recommendations on Climate Change adopted by UN Human Rights Treaty Bodies* (2018) 7 where it is noted that the CESCR is the only human rights treaty body to focus its climate change-related comments primarily on industrialised states.
[210] UNHRC *Climate Change and Poverty* (2019) A/HRC/41/39 para 74.
[211] Paras 71, 74 & 85.
[212] Para 85. See para 80-86 in relation to UN human rights mechanisms.
[213] Para 82.

of ESCRs is required. Such an approach should include more "detailed, actionable recommendations" and "meaningful guidance" regarding measures and procedures required. This dissertation investigates how the principles of IEL might assist the Committee in designing a more appropriate response and guiding its future recommendations in relation to the environment.[214]

An approach that incorporates existing environmental law principles could assist the Committee in providing greater clarity to States Parties on the nature and scope of their obligations and ensure that environmental dimensions of the relevant rights are dealt with appropriately. By way of example, in response to the report of the Philippines in 2016, the Committee expressed concern regarding declining fish stocks in the State Party and the impact that this, in conjunction with encroaching commercial fishing, was having on small-scale fishers.[215] The Committee's recommendation included delineation of municipal waters and coastal zoning as well as a broad reference to "all measures necessary" to improve fishers' income.[216] From an environmental perspective, it is surprising that the recommendation made no mention of sustainable use, a well-known principle of IEL.[217] Sustainable use refers to the exploitation of renewable natural resources at a rate which allows for their continued renewal. The principle forms one of three fundamental objectives of the widely ratified Convention on Biological Diversity[218] and has been described as a customary rule or norm of international law.[219] In relation to peasants and other people working in rural areas (including small-scale fishers) the UN General Assembly has also recognised obligations of sustainable use on States Parties.[220] Measures in relation to the livelihood of small-scale fishers that do not address sustainable use could be rendered meaningless if the stocks are entirely depleted.[221] Any effective long-term approach concerning marine living resources that are essential for livelihoods should therefore incorporate this principle. If the Committee is able to integrate environmental principles in its

[214] Relevant principles of IEL are identified and examined in Chapter 4 and then applied to the interpretation of States Parties' obligations in Chapters 5 and 6.
[215] CESCR *Philippines* (2016) para 45.
[216] CESCR *Philippines* (2016) para 46.
[217] See Chapter 4, 4 3 1 3 below for a detailed discussion on the principle of sustainable use.
[218] Convention on Biological Diversity (adopted 5 June 1992, entered into force 29 December 1993) 1760 UNTS 79.
[219] Beyerlin & Marauhn *International Environmental Law* 82; C Redgwell "Sustainable Use of Natural Resources" in L Krämer & E Orlando (eds) *Principles of Environmental Law* (2018) 115 116 & 122.
[220] See UNGA *United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas* (21 January 2019) A/RES/73/165 article 17(7), 20(1)-(2) & 21(5).
[221] With respect to a similar concern in Solomon Islands, the Committee has recommended that the State Party "undertake measures to prevent the excessive exploitation of the country's forestry and fishing resources". Although the Committee recommends the prevention of excessive exploitation, the principle of sustainable use could give useful content to this recommendation. See CESCR *Concluding Observations, Solomon Islands* (14 May 1999) E/C12/1/Add33 para 26.

environment-related obligations, it would ensure that recommendations in this regard are more informed and effective in protecting the environment and natural resources for the sake of the human rights dependent on them.

It is significant to note that the Committee has already demonstrated a willingness to refer to relevant environmental principles in its recommendations on a few occasions. In its concluding observations in relation to Argentina in 2018 the Committee made explicit reference to the precautionary principle.[222] The Committee recommended that:

> "[T]he State party adopt a regulatory framework that includes the application of the precautionary principle with regard to the use of harmful pesticides and herbicides […] in order to avoid the negative health impacts and environmental degradation that can result from their use".[223]

The Committee also refers to the precautionary principle in its general comment on science and ESCRs in the context of participation in scientific processes.[224] Similarly, the Committee refers to the prohibition of transboundary harm in its general comment on state obligations in the context of business activities.[225]

The use of an existing principle in IEL introduces a concept with a degree of recognised meaning and content which can assist the Committee in formulating its concluding observations while also guiding the State Party in developing an appropriate response in light of the Committee's recommendations. This facilitates harmonisation between IEL and human rights law. The quality and effectiveness of the Committee's recommendations in the context of the intersection between ESCRs and the environment would be significantly strengthened by building synergies between the Committee's existing doctrine and the principles of IEL.

The Committee should be commended for its readiness to embrace the environmental dimensions of the rights and obligations in the ICESCR. It has demonstrated an awareness of the complex relationship between the environment and human rights, and a willingness to adapt to evolving conditions by increasingly concerning itself with matters related to the environment and climate change. However, it is important to ensure that this inclusion of environmental factors is considered and appropriate, and guided by relevant principles such as those recognised in IEL. It will become ever more important for the Committee to adopt a comprehensive and systematic approach which ensures the consistent integration of

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[222] The precautionary principle is discussed at Chapter 4, 4 3 2 4 below.
[223] CESCR *Argentina* (2018) para 60.
[224] CESCR *General Comment No 25* para 56.
[225] CESCR *General Comment No 24* para 27.

environmental considerations within the obligations of States Parties as interpreted by the Committee through its jurisprudence, general comments and concluding observations.

2 4 Conclusion

The rights in the ICESCR are at risk due to expanding environmental degradation and rapidly growing threats from climate change. It is no longer possible to ensure the rights to health, food, water and housing without taking the environmental dimensions of these rights into account. In order to ensure the protection and realisation of the rights in the Covenant, it is vital that environmental considerations are incorporated into the interpretation of States Parties' obligations by the Committee through its statements, general comments, concluding observations and views under the Optional Protocol. Some guidance can be obtained from the work of the special procedures of the UNHRC, particularly in relation to the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment.

The Committee has shown a laudable readiness to incorporate environmental considerations within the scope of rights and obligations in the Covenant. However, any attempt to integrate the environment into the work of the Committee is only useful to the degree that it is consistent and effective. The environment-related obligations identified and discussed above do not always provide States Parties to the Covenant with the necessary detailed and actionable recommendations and guidance required to effectively implement these obligations. The Committee will be more effective in addressing environmental threats to human rights if it is able to provide more meaningful and substantive guidance to States Parties in relation to such obligations. It is therefore proposed that a more systematic and principled approach to the inclusion of environmental considerations could ensure the consistent integration of environment-related obligations in the Committee's work and allow the Committee to provide more appropriate recommendations in respect of the environment.

This chapter concluded by arguing that the principles of IEL constitute a vital tool for the Committee in advancing the latter objective. The principles of IEL are considered in more detail in Chapter 4. The following chapter lays the foundation for the interpretation of Covenant obligations by examining the rules of interpretation applicable to international treaties, and human rights treaties in particular. The purpose of the next chapter is to investigate how the relevant rules of human rights treaty interpretation can facilitate the integration of environmental principles within the interpretation of States Parties' obligations under the Covenant.

CHAPTER 3:
GREENING THE COVENANT:
LAYING THE INTERPRETIVE FOUNDATIONS

3 1 Introduction

Considering the risks posed by environmental degradation and climate change as examined in Chapter 2 above, it is necessary to explore how environmental considerations should be incorporated into the interpretation of States Parties' obligations under the Covenant. This greening of Covenant provisions would ensure that ESCRs are not compromised or violated as a result of environmental harm and would also safeguard the continued realisation of ESCRs by protecting the environment on which these rights depend.

Human rights approaches to the environment include an interpretation of rights that incorporates the environment.[1] As noted in Chapter 1, this dissertation seeks to expand the interpretation of the Covenant in order to include environmental considerations within the scope of States Parties' obligations under the Covenant. In order to do so, the accepted methodologies applicable to treaty interpretation must be applied. These are examined in detail in this chapter.

Any interpretation of the provisions of the Covenant must be approached in accordance with the relevant rules of interpretation applicable to international treaties. This includes the Vienna Convention on the Law of Treaties ("VCLT")[2] as well as the more specialised interpretive methods developed in relation to human rights treaties, including teleological interpretation, the principle of effectiveness, and the evolutive approach.

This chapter begins by describing traditional human rights approaches to environmental protection. The objectives of environmental protection and realisation of human rights will also be distinguished from one another. The accepted rules and methods of interpretation applicable to international treaties under the VCLT are then investigated. Following this, the methods used in the interpretation of human rights treaties are examined. Finally, the interpretive methodology of the Committee is analysed along with the possibilities for integrating environmental considerations within the Covenant through this methodology.

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[1] See Chapter 1, 1 5 1 and 3 2 below.
[2] Vienna Convention on the Law of Treaties (adopted 23 May 1969, entered into force 27 January 1980) 1155 UNTS 331.

3 2 Human rights approaches to environmental protection

Literature on the intersection between human rights and the environment has, for the most part, emphasised the potential for human rights to enhance environmental protection. Framed in this manner, the underlying objective could be understood by some as being the protection of the environment. It is necessary to distinguish the latter approach from this dissertation which investigates how environmental considerations can be integrated into ESCRs in order to ensure that those rights are more effectively protected both now and into the future. Although this necessarily involves environmental protection, the main objective is to protect the environmental base which is a prerequisite for the fulfilment of these human rights. This is not to say that there is no merit in expanding environmental protection through human rights mechanisms, but the motivation for this research is the realisation of ESCRs and not the protection of the environment *per se*.[3]

Chuffart and Viñuales note the emphasis on human rights approaches to environmental protection in international law and point out that it can also be useful to consider human rights from an environmental perspective:

> "Human rights have, of course, much to offer to international environmental law, but the opposite is also true. […] [L]ooking at human rights from the environmental shore provides a number of insights which are potentially useful not only for a broader understanding of human rights and their normative context but also, and more importantly, for the continuing quest for their implementation".[4]

This dissertation views ESCRs from "the environmental shore" in order to examine how the integration of environmental considerations can protect and enhance the realisation of the rights in the Covenant. It is nevertheless useful to briefly outline existing human rights approaches to environmental protection. Although the underlying objective of these approaches may differ, they provide deeper insights into how the relationship between human rights and the environment can be understood.

As noted in Chapter 1, a number of human rights approaches to environmental protection are identified in the literature.[5] Boyle and Anderson identify three approaches, namely: the mobilisation of existing human rights for environmental ends; the reinterpretation of existing rights to incorporate environmental concerns; and the establishment of new rights with an

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[3] Of course, in many instances the goals of environmental protection and the realisation of ESCRs will be mutually supporting.
[4] S Chuffart & JE Viñuales "From the Other Shore: Economic, Social, and Cultural Rights from an International Environmental Law Perspective" in Riedel E, G Giacca & C Golay (eds) *Economic, Social and Cultural Rights in International Law: Contemporary Issues and Challenges* (2014) 286 307.
[5] See Chapter 1, 1 5 1.

explicit environmental character.[6] Leib identifies similar approaches referred to as: the expansion theory (bestowing an environmental interpretation on established human rights);[7] the environmental democracy theory (empowering the public through the use of environmental procedural rights);[8] and the genesis theory (the creation of a new human right based on the claim that a right to the environment is indispensable for the fulfilment of other human rights).[9] Kiss and Shelton identify the following four approaches: (1) the utilisation of relevant human rights in the drafting of international environmental instruments; (2) the application or recasting of existing human rights to include an environmental dimension where they are threatened by environmental harm; (3) the incorporation of the environmental agenda into human rights by formulating a new substantive environmental right;[10] and (4) the reframing of the question by addressing ethical and legal duties instead of rights.[11]

The reinterpretation of existing human rights has many potential benefits for environmental protection, and therefore for the continued feasibility and promotion of the rights themselves. In contrast to substantive environmental rights, which are still being debated in the international arena, the rights in the Covenant are already accepted and established, allowing for a broader possible acceptance of the environmental dimensions thereof. From an anthropocentric, human rights-based perspective, it is essential to take environmental considerations into account to ensure (1) that the environment is adequately protected in order to preserve its human rights-supporting functions; and (2) that the enjoyment of human rights is not unduly impeded by environmental threats and degradation.

This dissertation will use the expansion theory or the reinterpretation of existing human rights obligations to extend the interpretation and application of the Covenant in order to incorporate environmental dimensions. The underlying aim is to further the objectives of the Covenant and safeguard the rights therein. As the effective integration of environmental

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[6] MR Anderson "Human Rights Approaches to Environmental Protection: An Overview" in AE Boyle & MR Anderson (eds) *Human Rights Approaches to Environmental Protection* (1998) 1 4.
[7] LH Leib *Human Rights and the Environment* (2011) 71-72.
[8] Leib *HR and the Environment* 81.
[9] Leib *HR and the Environment* 88. Chuffart and Viñuales similarly identify three approaches: broadening existing rights; asserting substantive environmental rights; and asserting procedural environmental rights. See Chuffart & Viñuales "From the Other Shore" in *ESCR in International Law* 288.
[10] See, for example, UNHRC *Rights of the Child: Realizing the Rights of the Child through a Healthy Environment* (13 October 2020) A/HRC/RES/45/30; UNGA *Towards a Global Pact for the Environment* (14 May 2018) A/RES/72/277. See further Knox "The Global Pact for the Environment" (2019) 28 *RECIEL* 40-47; International Group of Experts for the Pact "Text of the Draft Global Pact for the Environment by the IGEP" (2017) *Global Pact for the Environment* <https://globalpactenvironment.org/en/document/draft-global-pact-for-the-environment-by-the-igep/> (accessed 15-10-2020). See also Atapattu *HR Approaches to Climate Change* 51-62. See also Chapter 1, 1 1.
[11] AC Kiss & D Shelton *International Environmental Law* 3 ed (2004) 663. See also D Shelton, "Human Rights and the Environment: What Specific Environmental Rights Have Been Recognized?" (2006) 35 *DJILP* 130.

considerations within the Covenant requires legitimacy and support from States Parties to the Covenant, any interpretation must be grounded in the existing rules regarding treaty interpretation, and specifically the interpretation of human rights treaties. These rules of interpretation are therefore set out in more detail in the sections that follow.

3 3 Interpretation of the Covenant

3 3 1 Introduction

This section outlines the rules applicable to the interpretation of the Covenant. It begins with a discussion of the nature legal interpretation in international treaty law, with an emphasis on the rules set out in the VCLT. As particular interpretive methods have developed regarding human rights treaties, these are addressed separately before analysing the particular interpretive methods applied and endorsed by the Committee itself in interpreting the Covenant.

3 3 2 Treaty interpretation in international law

3 3 2 1 The nature of legal interpretation

Legal interpretation, like any textual interpretation, involves ascribing meaning to the language of the text. This is not always a straightforward process as meaning is rarely (if ever) clear and fixed.[12] There is a range of possible meanings that could be attributed to a text through interpretation, and it is not always possible to determine which interpretation is 'correct'.[13] It is therefore important to differentiate between the extraction of meaning and the construction of meaning. The latter is the act of retrieving the 'true' meaning hidden within the text.[14] This requires the interpreter to buy into the "myth of the mechanical extraction of pre-ordained meaning".[15] In reality, the text should be seen as holding within it

[12] This indeterminacy of meaning is a central element of the interpretive turn in legal interpretation. On the interpretive turn generally, see S Fish *Is There a Text in This Class: The Authority of Interpretive Communities* (1980); O Fiss "Objectivity and Interpretation" (1982) 34 *Stanford Law Review* 739 739-763; RL West "The Meaning of Equality and the Interpretive Turn" (1990) 66 *Chicago-Kent Law Review* 451 451-480; SM Feldman "The New Metaphysics: The Interpretive Turn in Jurisprudence" (1991) 76 *Iowa Law Review* 661 661-699; RL West "Are There Nothing but Texts in This Class? Interpreting the Interpretive Turns in Legal Thought" (2000) 76 *Chicago-Kent Law Review* 1125 1125-1165.

[13] P Allott "Interpretation: An Exact Art" in A Bianchi, D Peat & M Windsor *Interpretation in International Law* (2015) 373 374; J d'Aspremont "The Multi-Dimensional Process of Interpretation: Content-Determination and Law-Ascertainment Distinguished" in A Bianchi, D Peat & M Windsor *Interpretation in International Law* (2015) 111 115-116.

[14] D Peat & M Windsor "Playing the Game of Interpretation: On Meaning and Metaphor in International Law" in A Bianchi, D Peat & M Windsor (eds) *Interpretation in International Law* (2015) 3 9; d'Aspremont "The Multi-Dimensional Process" in *Interpretation in International Law* 114.

[15] d'Aspremont "The Multi-Dimensional Process" in *Interpretation in International Law* 116.

"countless possible meanings".[16] Interpretation is not an empirical process of "unearthing what is already *out there*",[17] but rather "an act of the imagination"[18] which involves creatively constructing meaning.[19] There is no single correct or true meaning to be extracted and the act of interpretation could therefore be described as an art rather than an exact science.[20]

The absence of a single correct meaning of the text, it is necessary to consider the context within which interpretation takes place. Allott notes that interpretation is carried out at various moments in the life of the text, by various interpreters, and in various circumstances, all forming part of the "unique 'becoming'" of the text.[21] He identifies three 'moments' of interpretation in the life of a legal text: (1) the programmatic moment of interpretation "in *making* the text"; (2) the prevenient moment of "interpreting an existing text in order to exercise *influence* over its future interpretation"; and (3) the pragmatic moment of interpreting the text "in order to *apply* it authoritatively".[22] This study is concerned with the prevenient moment which is characterised by efforts aimed at influencing the eventual interpretation of those who have legal power to make authoritative interpretations and decisions when the text is interpreted and applied in the pragmatic moment.[23]

This idea of 'moments' in interpretation serves as a reminder that interpretation is not static, but rather "a moment in the colourful life of a text, an event in its ongoing biography".[24] Meaning is not permanently fixed, but rather shifts and evolves with each interpretation (and interpreter), and must adapt to new contexts. Allott suggests that interpretation can be understood as the resolution of the tension between the text and its context.[25] It is interesting to note that Allot's conceptualisation of the text as a "living process" echoes the characterisation of human rights instruments by international tribunals and the application of the evolutive approach discussed below.[26]

Despite the multiplicity of potential meaning and the recognition that the interpretation of a text involves a creative construction of meaning, legal interpretation is constrained by

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[16] Allott "Interpretation" in *Interpretation in International Law* 374.
[17] d'Aspremont "The Multi-Dimensional Process" in *Interpretation in International Law* 115.
[18] Allott "Interpretation" in *Interpretation in International Law* 373.
[19] Peat & Windsor "Playing the Game of Interpretation" in *Interpretation in International Law* 9.
[20] Allott "Interpretation" in *Interpretation in International Law* 382; DB Hollis "The Existential Function of Interpretation in International Law" in A Bianchi, D Peat & M Windsor (eds) *Interpretation in International Law* (2015) 78 84-85.
[21] Allott "Interpretation" in *Interpretation in International Law* 380.
[22] 380-381. Emphasis in original.
[23] 381.
[24] 376.
[25] 382-383.
[26] 376. See 3 3 3 on human rights treaty interpretation and see 3 3 3 2 2 below in relation to the evolutive approach.

specific rules. Formal rules for the interpretation of treaties are set out in articles 31 to 33 of the VCLT. Commentators have recognised the problematic nature of prescribing methods of treaty interpretation within a treaty which is itself open to interpretation. Allott notes, for example, that the use of the term "context" in the VCLT has the effect of "opening the interpretative process as wide as the imagination of the interpreters" illustrating the "fatuity" of a treaty outlining universal rules for interpretation when that text is itself open to interpretation.[27] Peat and Windsor note that the VCLT lends "an aura of formalism" to the interpretation of international treaties.[28] Although these rules are themselves incapable of a single fixed or true meaning, Allott aptly points out that it may be important to make use of these rules if the resulting interpretation is to have persuasive effect:

> "Interpretation in all fields, including in the legal field, has no inherent limits to its reliance on external contexts and references and associations. But its effectiveness in changing minds and causing social change depends on pragmatic respect for conventionally determined expectations limiting its inherent freedom, expectations that are indeterminate but numerous and powerful".[29]

In other words, an interpreter is entitled to take any number of factors into account and this could produce a vast range of possible interpretations, but these interpretations may not have the desired impact or influence if they fail to comply with the established rules of the game, i.e. the provisions of the VCLT. The formal rules of interpretation in the VCLT are widely recognised and, in order to propose a convincing and defensible interpretation of a treaty within the international legal arena, one must "play by the rules".[30] The art of interpretation therefore involves prudent use of the creative imagination to propose "a better kind of law for a better kind of international society" within the conventional constraints imposed by the VCLT.[31] As will be argued below, this does not mean that treaty interpretation should be static and formalistic. In fact, the interpretation of human rights treaties, and indeed the Covenant itself, illustrates the scope for the imaginative art of interpretation within the bounds of the VCLT.

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[27] Allott "Interpretation" in *Interpretation in International Law* 383. See also Allott "Interpretation" in *Interpretation in International Law* 375 where the following is noted: "It is a source of special intellectual pleasure to note that, from the moment they were put on paper, the Vienna Convention provisions on the interpretation of treaties have themselves been subjected to interpretation of an exceptionally intense and contentious kind. The Vienna Convention text on 'meaning' certainly has no 'meaning'".

[28] Peat & Windsor "Playing the Game of Interpretation" in *Interpretation in International Law* 5. See also d'Aspremont "The Multi-Dimensional Process" in *Interpretation in International Law* 122.

[29] Allott "Interpretation" in *Interpretation in International Law* 392.

[30] Peat & Windsor "Playing the Game of Interpretation" in *Interpretation in International Law* 5.

[31] Allott "Interpretation" in *Interpretation in International Law* 392.

3 3 2 2 Treaty interpretation prior to the VCLT

Prior to the adoption of the VCLT in 1969, there were three principal approaches to treaty interpretation. The first was the subjective approach which aims to establish the intention of the parties; the second was the objective or textual approach which focuses on the meaning of the text; and the third was the teleological approach which emphasises the object and purpose of the treaty.[32] As Fitzmaurice notes, "[t]hese schools of interpretation are not mutually exclusive" and can be applied in conjunction with one another.[33] In relation to human rights treaty interpretation, the teleological approach was recognised as particularly important, while the textual approach was generally understood to be less rigid in the case of human rights treaties.[34]

The VCLT, in formalising the rules or principles of treaty interpretation, draws on all three of the abovementioned approaches.[35] It accommodates these methods of interpretation, and proponents of each of these approaches are able find support for their position within its provisions.[36] It therefore cannot be said that the VCLT validates one particular approach. Despite the formalisation of the approaches to interpretation within the VCLT, Gardiner argues that the provisions have been flexibly interpreted and applied, and suggests that they are "more in the nature of principles and indications of admissible material".[37] He suggests that the provisions should be imagined as "scaffolding" for interpretation as opposed to a "formulaic set of requirements".[38] The components of this scaffolding in the VCLT are discussed in more detail below.

3 3 2 3 The provisions of the VCLT

Article 31 of the VCLT sets out the "general rule of interpretation". Article 31(1) states:

> "A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in light of its object and purpose".

Article 31(2) elaborates on the meaning of context; article 31(3) provides for additional factors that should be considered; and article 31(4) makes reference to the intention of the

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[32] E Bjorge "The Vienna Rules, Evolutionary Interpretation and the Intentions of the Parties" in A Bianchi, D Peat & M Windsor (eds) *Interpretation in International Law* (2015) 189 196; M Fitzmaurice "Interpretation of Human Rights Treaties" in D Shelton (ed) *The Oxford Handbook of International Human Rights Law* (2013) 739 745; M Fitzmaurice "The Practical Working of the Law of Treaties" in MD Evans (ed) *International Law* 2 ed (2006) 187 199.
[33] Fitzmaurice "Law of Treaties" in *International Law* 199.
[34] Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 745-746.
[35] Fitzmaurice "Law of Treaties" in *International Law* 199.
[36] Hollis "Existential Function of Interpretation" in *Interpretation in International Law* 81; Fitzmaurice "Law of Treaties" in *International Law* 199.
[37] R Gardiner "The Vienna Convention Rules on Treaty Interpretation" in DB Hollis (ed) *The Oxford Guide to Treaties* (2012) 475 492 & 504.
[38] Gardiner "Vienna Convention Rules" in *Oxford Guide to Treaties* 492 & 504.

parties. Article 31 therefore provides for interpretation which considers ordinary meaning, context, and object and purpose. Many commentators have noted that the use of the singular "rule" in the title of article 31 suggests that treaty interpretation should involve all these elements, rather than proposing a piecemeal or hierarchical approach.[39] The elements of article 31 have also been described as representing a "logical progression".[40] Çalı supports a holistic approach to article 31, recognising the importance of examining how "the wording, context, and object and purpose interact with each other".[41] Interpretation which combines these elements of article 31 has also been referred to as the "crucible approach".[42] The European Court of Human Rights ("ECtHR") endorsed this approach in *Golder v United Kingdom*[43] where the Court confirmed that "the process of interpretation of a treaty is a unity, a single combined operation" which places the various elements of article 31 "on the same footing".[44]

Turning to the specific components of article 31, the provision begins by stating that interpretation of a treaty must be done "in good faith", requiring the parties "to act honestly, fairly and reasonably" in interpreting treaties.[45] The good faith requirement means that parties are bound by what they have agreed to.[46] The parties cannot deliberately misconstrue a provision to exclude its ordinary meaning in order to avoid the associated obligations.

The requirement to consider "ordinary meaning" supports an objective textual approach (or literal approach) to treaty interpretation. As noted above, an "ordinary" or universal meaning to language is frequently elusive. The absence of a fixed objective and true meaning necessitates the consideration of context and object and purpose.[47] Gardiner notes that context and object and purpose are often "pointers to the appropriate ordinary meaning".[48] Establishing ordinary meaning can be particularly problematic in relation to

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[39] Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 746; Fitzmaurice "Law of Treaties" in *International Law* 199; Gardiner "Vienna Convention Rules" in *Oxford Guide to Treaties* 480; B Çalı "Specialized Rules of Treaty Interpretation: Human Rights" in DB Hollis (ed) *The Oxford Guide to Treaties* (2012) 525 528.
[40] Fitzmaurice "Law of Treaties" in *International Law* 199.
[41] Çalı "Specialized Rules" in *Oxford Guide to Treaties* 528 & 532-533.
[42] Çalı "Specialized Rules" in *Oxford Guide to Treaties* 528 & 532-533.
[43] *Golder v United Kingdom* Application No 4451/70 (1975) ECtHR ("*Golder*").
[44] *Golder* para 30. This judgment was made prior to the VCLT's entry into force. See also Çalı "Specialized Rules" in *Oxford Guide to Treaties* 528; Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 761.
[45] SA Yeshanew *The Justiciability of Economic, Social and Cultural Rights in the African Regional Human Rights System: Theories, Laws, Practices and Prospects* (2011) 44; MM Sepúlveda *The Nature of the Obligations under the International Covenant on Economic, Social, and Cultural Rights* (2003) 76.
[46] Sepúlveda *Nature of Obligations under the ICESCR* 75.
[47] Gardiner "Vienna Convention Rules" in *Oxford Guide to Treaties* 480.
[48] Gardiner "Vienna Convention Rules" in *Oxford Guide to Treaties* 481.

human rights treaties that very often include "abstract concepts or general terminology that may apply to many different situations or include many particular elements or principles".[49]

The context referred to in article 31(1) is further defined in article 31(2) which states that context includes: the text itself; its preamble and annexes; agreements between the parties connected to the treaty's conclusion; and instruments related to the treaty which have been accepted by the parties.[50] Contextual interpretation can also be described as systematic interpretation, referring to a systematic consideration of a treaty as a whole.[51]

The object and purpose of a treaty are important elements of its interpretation and central to the teleological approach. Article 31(1) requires that the meaning attributed to the treaty must be consistent with its object and purpose, which can be determined through reference to the "aims, nature and end" of the treaty as a whole.[52] Object and purpose can, however, be difficult to establish. Some argue that a treaty may have multiple objects and purposes, and individual provisions may even have diverging objects and purposes.[53]

Gardiner notes that the reference to object and purpose in article 31 "is not a teleological imperative subordinating the terms of the treaty to its purpose", but rather an enabling provision which allows for the object and purpose to form part of the interpretation.[54] The language of treaty provisions therefore does not lose significance where object and purpose are emphasised. Of course, there may be disagreement regarding the reach of object and purpose where there is a conflict with the ordinary meaning of the terms. A teleological approach promotes the object and purpose to the extent that the language of the treaty allows it. As is discussed below, this approach is particularly important for the interpretation of human rights treaties.

Article 31(3) of the VCLT states that any subsequent agreement, subsequent practice, and any relevant rules of international law must be taken into account. It is not always clear when or how subsequent practice should influence interpretation. Importantly for human rights treaties, the outcomes of human rights treaty monitoring procedures could be

[49] Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 748.
[50] Sepúlveda *Nature of Obligations under the ICESCR* 76.
[51] Sepúlveda *Nature of Obligations under the ICESCR* 75.
[52] Yeshanew *Justiciability of ESCR* 45.
[53] Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 752; J Arato "Accounting for Difference in Treaty Interpretation over Time" in A Bianchi, D Peat & M Windsor (eds) *Interpretation in International Law* (2015) 205 213.
[54] Gardiner "Vienna Convention Rules" in *Oxford Guide to Treaties* 496.

considered subsequent practice as states generally give tacit approval to such outcomes.[55] Yeshanew echoes this position, arguing that:

> "[T]he views on individual complaints, concluding observations and general comments of human rights monitoring organs in the UN human rights system […] may also be regarded as subsequent practice or authoritative institutionalized practice in the application and interpretation of those treaties".[56]

He also argues that consensus regarding subsequent practice is more important than the status of such practice as binding or non-binding.[57] Arato suggests that reliance on the practice of states is influenced by the nature of the norm in question. Where human rights are concerned, it is unlikely that subsequent state practice would be relied on in support of a restrictive interpretation of the relevant right.[58] Subsequent practice must therefore be understood in combination with other interpretive approaches.

As for the "relevant rules of international law applicable in the relations between the parties"[59], this accords with the principle of systematic integration in international law and ensures that the treaty is not interpreted in a "legal vacuum" without due regard for the broader context of international law.[60] Chuffart and Viñuales note, for example, how the ECtHR has relied on the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters ("the Aarhus Convention")[61] as relevant international material for the interpretation of the European Convention on Human Rights ("ECHR").[62]

Article 31 concludes with reference to the intention of the parties to the treaty. Article 31(4) states that "[a] special meaning shall be given to a term if it is established that the parties so intended". The intention of the parties is a traditional concept in treaty interpretation, based on the premise that the parties have agreed to a particular understanding of the treaty, and their intentions in concluding the treaty are paramount.

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[55] Yeshanew *Justiciability of ESCR* 47-48. The legitimacy of the source may be called into question where states have noted objections to the outcomes or findings.
[56] Yeshanew *Justiciability of ESCR* 50-51.
[57] Yeshanew *Justiciability of ESCR* 47.
[58] Arato "Treaty Interpretation over Time" in *Interpretation in International Law* 223. Arato illustrates that while subsequent practice has been relied on in the ECtHR to motivate for expanding freedom of association, the object and purpose would prevail over subsequent practice if the state practice indicated a more restrictive approach to human rights.
[59] VCLT article 31(3)(c).
[60] Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 749; Yeshanew *Justiciability of ESCR* 51.
[61] Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters 2161 UNTS 447.
[62] European Convention for the Protection of Human Rights and Fundamental Freedoms (adopted 4 November 1950, entered into force 3 September 1953, as amended by additional protocols) 213 UNTS 222 ("European Convention on Human Rights"). See Chuffart & Viñuales "From the Other Shore" in *ESCR in International Law* 307; *Ivan Atanasov v Bulgaria* Application No 12853/03 (2010) ECtHR para 55-57.

Bjorge argues that the search for the parties' intention is "the very aim of the process set out in Article 31 of the VCLT". [63] In line with the idea of a singular rule in article 31, he suggests that the process set out in the article will give effect to article 31(4).[64] In Bjorge's view, the intention of the parties is determined through an application of the means of interpretation in article 31(1)-(3) and does not constitute "a separately identifiable factor".[65]

In addition to the general rule of interpretation in article 31, article 32 of the VCLT sets out supplementary means of interpretation. [66] These supplementary means include preparatory work in relation to the treaty and the circumstances of its conclusion. In contrast to the elements of article 31, the supplementary means are only put to use where the application of the general rule in article 31 "does not provide a satisfactory result or leads to absurd meanings".[67] Yeshanew notes that the *travaux preparatoires* of human rights treaties can be useful in providing insight into the meaning of the treaty or specific provisions thereof, or for "identifying sources of inspiration for the instrument which in turn are relevant in the treaty's interpretation".[68] While this is true, the preparatory work and the related intention of the drafters holds less weight in the case of human rights treaties which emphasise the position at the time of interpretation.[69]

Finally, article 33 governs the interpretation of treaties where the treaty is authenticated in two or more languages. The article sets out the circumstances where another version of the text will be considered authentic, and states that the terms of the treaty "are presumed to have the same meaning in each authentic text" unless the parties or the treaty appoint one to prevail.[70]

In conclusion, it is clear that the VCLT accommodates different modes of interpretation, indicating that these should be employed concurrently as part of the single "rule" of interpretation. Such an approach will not, of course, result in a single "correct" interpretation, as the choices interpreters make and the different methods emphasised can result in a range of legitimate interpretations. As Hollis points out, the proponents of the different methods of interpretation have all found support for their particular method in the provisions of the

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[63] Bjorge "Vienna Rules" in *Interpretation in International Law* 190.
[64] 190.
[65] 191.
[66] Sepúlveda *Nature of Obligations under the ICESCR* 76.
[67] Yeshanew *Justiciability of ESCR* 53.
[68] Yeshanew *Justiciability of ESCR* 52.
[69] Sepúlveda *Nature of Obligations under the ICESCR* 76. In this regard see 3 3 3 2 2 on the evolutive approach.
[70] VCLT article 33(3).

VCLT.[71] Given the potential for various approaches (and consequently various meanings) it is therefore necessary that interpreters are transparent about the approaches which have been favoured. The following section analyses the particular approaches emphasised in the interpretation of human rights treaties.

3 3 3 Interpretation of human rights treaties

3 3 3 1 A specialised regime for human rights treaties?

The VCLT provisions provide important rules for interpretation which apply to all treaties, including human rights treaties.[72] However, due to their distinctive nature, there is some debate around whether human rights treaties require a specialised or self-contained regime in relation to interpretation.[73] Alston and Goodman suggest that an obstacle to "reliable generalization about treaty interpretation", and therefore a reason for varied approaches, is the fact that treaties serve a variety of purposes.[74] However, Fitzmaurice argues that the idea of a self-contained regime may "giv[e] too much credence to the 'separateness' of a particular field of law" as there is never a complete separation from general law.[75] The ECtHR has, however, confirmed the distinctive nature of human rights treaties in relation to the ECHR, noting that "regard must be had to its special character as a treaty for the collective enforcement of human rights and fundamental freedoms".[76]

In order to understand the distinct approaches to human rights treaties, it is useful to consider the characteristics of such treaties that have a bearing on their interpretation. Fitzmaurice identifies two important shared characteristics.[77] The first relates to the "so-called 'constitutional' nature" of the treaties and is linked to the non-reciprocal nature of the obligations.[78] The second relates to the subject matter of these treaties, requiring what is known as the '*pro homine*' approach which seeks to interpret a treaty so as to give practical effect to the rights and needs of the individual.[79] Fitzmaurice notes that the latter approach

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[71] Hollis "Existential Function of Interpretation" in *Interpretation in International Law* 81.
[72] Sepúlveda *Nature of Obligations under the ICESCR* 77.
[73] See Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 740-744; Yeshanew *Justiciability of ESCR* 43; Arato "Treaty Interpretation over Time" in *Interpretation in International Law* 209-217.
[74] P Alston & R Goodman *International Human Rights* (2013) 117. See also Arato "Treaty Interpretation over Time" in *Interpretation in International Law* 213; Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 752.
[75] Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 741.
[76] *Soering v United Kingdom* Application No 14038/88 (1989) ECtHR para 87.
[77] Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 742.
[78] Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 742; Yeshanew *Justiciability of ESCR* 43.
[79] Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 742.

confirms the 'constitutional' nature of human rights treaties by recognising that human rights arise from the nature of the human person and not from their explicit inclusion within a treaty.[80]

Çalı points out that the scope of application is also vastly different for human rights treaties:

> "Human rights treaties apply to a much larger universe of situations than many other international treaties. By their very nature, human rights provisions need to be interpreted in the light of changing political, social, and economic justifications of State policies".[81]

She explains that the act of interpreting and applying human rights treaties necessarily involves "subsuming particulars under generals in the domain of the relationship between the State and the individual".[82] For this reason the wording of human rights treaties tends to be more generalised and abstract than is the case with other treaties.[83]

Arato recognises that specialised treatment has been recommended for human rights treaties on the basis of their subject matter, their object and purpose, and the presence of third-party rights.[84] However, Arato makes a compelling argument for differential treatment on the basis of the nature of the obligations themselves. He distinguishes between absolute, reciprocal and interdependent obligations, and suggests that varying interpretive approaches of international tribunals can be explained according to the type of obligation being interpreted.[85] In other words, Arato argues that it is the nature of human rights obligations, which he identifies as absolute obligations, that should dictate the approach used. Fitzmaurice similarly notes that "the non-reciprocal character of human rights obligations" is a crucial distinguishing feature of human rights treaties.[86] The "mastery" that states enjoy over reciprocal obligations, allowing them to modify or replace obligations through agreement, cannot be applied to the same degree in relation to absolute obligations.[87] Arato explains that absolute obligations are:

> "[M]ore insulated from the changing will of the parties (reducing the weight assigned to subsequent practice that deviates from the treaty's object and purpose), and are potentially more amenable to autonomous evolution (again in light of its object and purpose)".[88]

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[80] Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 742
[81] Çalı "Specialized Rules" in *Oxford Guide to Treaties* 531.
[82] 531.
[83] Çalı "Specialized Rules" in *Oxford Guide to Treaties* 529; Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 748.
[84] Arato "Treaty Interpretation over Time" in *Interpretation in International Law* 209-217.
[85] 219-220.
[86] Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 744.
[87] Arato "Treaty Interpretation over Time" in *Interpretation in International Law* 222.
[88] 225.

This approach also allows for specialised treatment of different obligations within the same treaty, although most human rights treaties will largely be made up of such absolute obligations.[89]

It is necessary to consider how human rights tribunals deal with treaty interpretation in practice. Although each tribunal develops its own approaches, Fitzmaurice has identified three common approaches of human rights tribunals to treaty interpretation.[90] The first is a recognition of the subject matter of human rights, which links to the *pro homine* approach referred to above. The second is the recognition of the non-reciprocal rights and obligations and the constitutional nature of the treaties that justifies "a more teleological approach" to interpretation.[91] Finally, the interpretive practice of human rights tribunals indicates that there is a great deal of conscious cross-fertilisation among these tribunals through reference to each other's jurisprudence and to common sources.[92] In relation to the latter approach, Çalı notes that this may assist in "reaching a coherent or overlapping interpretation of human rights treaty provisions by cumulatively confirming a particular interpretation".[93] She links this approach to article 31(3) of the VCLT and points out that the practice of the Inter-American Court of Human Rights ("IACtHR") and the ECtHR demonstrates that this cross-fertilisation "enables interpreters to solidify and harmonize the meanings of human rights treaty provisions".[94]

Fitzmaurice notes that, among international scholars, there seems to be consensus that the interpretive approaches of human rights tribunals accord with the provisions of the VCLT, and that the varying approaches of these tribunals are moving towards a largely unified methodology.[95] Specific aspects of this methodology are discussed in more detail below, particularly in relation to the role of object and purpose, the closely related principle of effectiveness, and the evolutive approach to interpretation.

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[89] Arato "Treaty Interpretation over Time" in *Interpretation in International Law* 227.
[90] Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 754
[91] 754.
[92] 754.
[93] Çalı "Specialized Rules" in *Oxford Guide to Treaties* 542. See also C Medina "The Role of International Tribunals: Law-Making or Creative Interpretation" in D Shelton (ed) *The Oxford Handbook of International Human Rights Law* (2013) 649 652.
[94] Çalı "Specialized Rules" in *Oxford Guide to Treaties* 542.
[95] Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 769-770; Sepúlveda *Nature of Obligations under the ICESCR* 77.

3 3 3 2 The interpretive methodology of human rights tribunals

3 3 3 2 1 Object and purpose

Object and purpose are identified in article 31 of the VCLT as relevant factors to take into account when interpreting a treaty.[96] As noted above, it is widely recognised that the teleological approach is particularly important for human rights treaties.[97] The characteristics of human rights treaties, including their abstract wording, broadly formulated provisions, non-reciprocal obligations, and multilateral nature necessitates an approach that places less emphasis on the subjective and objective approaches to interpretation. Rather, the question is whether or not a particular interpretation is in line with the object and purpose of the treaty.[98]

As Yeshanew explains, a treaty's 'object and purpose' refers to "its aims, nature and end and applying to a treaty as a whole rather than to its parts or articles".[99] This can be identified through examining preambular provisions, treaty titles and "similar instruments concluded among a similar group of parties".[100] Fitzmaurice notes that many human rights fora have followed a teleological approach to interpretation by giving weight to "preambles of the conventions and even to extraneous documents, such as human rights declarations, to which the preambles generally refer".[101]

Commentators agree that there is an important link between the teleological approach and what is termed the 'principle of effectiveness'. Fitzmaurice suggests that the principle of effectiveness forms part of the requirement in article 31 to consider object and purpose.[102] Gardiner similarly argues that the VCLT requirements of 'good faith' and 'object and purpose', when read together, encapsulate the principle of effectiveness.[103] Çalı, on the other hand, describes effectiveness as the "overarching umbrella" encapsulating the "special rules" of human rights treaty interpretation.[104] She suggests that the effectiveness approach has its origins in article 31(1), arguing that human rights interpreters "view the

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[96] VCLT article 31. See Yeshanew *Justiciability of ESCR* 45.
[97] Yeshanew *Justiciability of ESCR* 45. For a detailed investigation of this approach in the African context, see A Amien *A Teleological Approach to the Interpretation of Socio-economic Rights in the African Charter on Human and Peoples' Rights* LLD dissertation, University of Stellenbosch (2017).
[98] Yeshanew *Justiciability of ESCR* 45; Çalı "Specialized Rules" in *Oxford Guide to Treaties* 529 & 533; Arato "Treaty Interpretation over Time" in *Interpretation in International Law* 205-206.
[99] Yeshanew *Justiciability of ESCR* 45.
[100] Yeshanew *Justiciability of ESCR* 45.
[101] Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 766.
[102] Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 746.
[103] Gardiner "Vienna Convention Rules" in *Oxford Guide to Treaties* 496. Çalı similarly suggests that the principle of effectiveness can be conceived of as "a holistic attempt to apply the VCLT" to human rights law. See Çalı "Specialized Rules" in *Oxford Guide to Treaties* 541.
[104] Çalı "Specialized Rules" in *Oxford Guide to Treaties* 547.

interaction between wording, context, and object and purpose as requiring 'effective, real, and concrete' protection of human rights provisions".[105]

Although there are different ways to conceptualise the place of the principle of effectiveness in human rights treaty interpretation, its meaning is relatively clear. Effectiveness is generally defined in terms of two aspects.[106] First, effectiveness means that each provision in a treaty has meaning and effect.[107] This has been linked to the idea of good faith interpretation in the VCLT.[108] This aspect of effectiveness also relates to the Latin maxim *ut res magis valeat quam pereat*, that a provision should be interpreted to have an effect rather than no effect.[109] A good faith interpretation should therefore assume that every provision of a treaty has significance and should be ascribed some effect.[110] The second aspect of effectiveness relates to teleological interpretation[111] and the idea that a treaty should be interpreted in such a way as to actually achieve its object and purpose.[112] In other words, a treaty must be afforded an interpretation that renders it practically effective in achieving its aims.[113]

Although the principle of effectiveness applies generally to treaty interpretation, Çalı illustrates how the abovementioned aspects of effectiveness have been developed in the context of human rights treaties.[114] The first aspect of effectiveness, requiring a good faith interpretation which has meaning and effect, emphasises the need for human rights treaties to have "real effect in terms of the concrete and actual lives" of individual rights-holders.[115] Çalı argues that this element of effectiveness also "requires the interpreter to take into account the ability of existing frameworks to protect individual rights over time".[116] This approach has been followed by the ECtHR in the case of *Airey v Ireland*[117] where the Court held that the ECHR "is intended to guarantee rights that are not theoretical or illusory, but

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[105] Çalı "Specialized Rules" in *Oxford Guide to Treaties* 537. See also Arato "Treaty Interpretation over Time" in *Interpretation in International Law* 205.
[106] Çalı "Specialized Rules" in *Oxford Guide to Treaties* 538; Fitzmaurice "Law of Treaties" in International Law 202; 198 Gardiner "Vienna Convention Rules" in *Oxford Guide to Treaties* 496.
[107] Çalı "Specialized Rules" in *Oxford Guide to Treaties* 538; Fitzmaurice "Law of Treaties" in International Law 202; Gardiner "Vienna Convention Rules" in *Oxford Guide to Treaties* 496.
[108] Gardiner "Vienna Convention Rules" in *Oxford Guide to Treaties* 496.
[109] Gardiner "Vienna Convention Rules" in *Oxford Guide to Treaties* 496; Fitzmaurice "Law of Treaties" in International Law 198; Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 751-752
[110] Fitzmaurice "Law of Treaties" in *International Law* 202.
[111] Çalı "Specialized Rules" in *Oxford Guide to Treaties* 538; Fitzmaurice "Law of Treaties" in *International Law* 202; Gardiner "Vienna Convention Rules" in *Oxford Guide to Treaties* 496.
[112] Çalı "Specialized Rules" in *Oxford Guide to Treaties* 538.
[113] Fitzmaurice "Law of Treaties" in *International Law* 202; Yeshanew *Justiciability of ESCR* 45.
[114] Çalı "Specialized Rules" in *Oxford Guide to Treaties* 538.
[115] 539.
[116] 539.
[117] *Airey v Ireland* Application No 6289/73 (1979) ECtHR.

rights that are practical and effective".[118] In the context of the African Commission on Human and People's Rights this principle has, for example, been expressed as requiring a "responsiveness to African circumstances".[119]

The second aspect of effectiveness, relating to teleological interpretation, has been linked to the burden of proof in the human rights context. Çalı argues that this aspect of effectiveness requires the burden of proof to shift from the individual to the state in order to justify a failure or infringement on the state's part.[120] This is due to the objects and purposes of human rights treaties which relate to the protection of the human person.[121] This facet of effectiveness and teleological interpretation is associated with the idea of *pro homine* interpretation, i.e. interpretation which favours the rights-holder.[122] *Pro homine* interpretation seeks to give the broadest possible protection to the rights-holder. The IACtHR has developed the *pro homine* approach to the extent that an interpretation which favours the individual is followed "even if this comes at the expense of the wording or context".[123] An effective interpretation which seeks to favour the individual in their concrete circumstances should be pragmatic and take into account present day conditions.[124] Çalı notes that "[a]n important consequence of the employment of effectiveness has been to disregard original intent and formal protection of rights in favour of dynamic interpretation and practical protection of rights."[125]

3 3 3 2 2 The evolutive approach

The second important approach to human rights treaty interpretation rooted in object and purpose is the evolutive approach (or evolutionary interpretation).[126] This refers to the need for a treaty to be interpreted in light of changing circumstances and evolving meaning. As human rights treaties are long-term treaties which need to be applied to a variety of circumstances over time, their interpretation must be flexible and sensitive to change.[127] As

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[118] *Airey v Ireland* para 24. Çalı "Specialized Rules" in *Oxford Guide to Treaties* 539.
[119] *Social and Economic Rights Action Centre (SERAC) v Nigeria* Communication No 155/96 (2001) ACHPR para 68.
[120] Çalı "Specialized Rules" in *Oxford Guide to Treaties* 540.
[121] Sepúlveda *Nature of Obligations under the ICESCR* 79.
[122] Çalı "Specialized Rules" in *Oxford Guide to Treaties* 540. Arato "Treaty Interpretation over Time" in *Interpretation in International Law* 205.
[123] Çalı "Specialized Rules" in *Oxford Guide to Treaties* 540. See *Case of the 19 Merchants v Colombia* (Merits, Costs, Reparations) Series C No 109 (2004) IACtHR para 173; *Soering v United Kingdom* para 87. See also Arato "Treaty Interpretation over Time" in *Interpretation in International Law* 205; Sepúlveda *Nature of Obligations under the ICESCR* 79; Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 765
[124] Yeshanew *Justiciability of ESCR* 45.
[125] Çalı "Specialized Rules" in *Oxford Guide to Treaties* 547.
[126] Sepúlveda *Nature of Obligations under the ICESCR* 81.
[127] Sepúlveda *Nature of Obligations under the ICESCR* 81.

Alston and Goodman note, "[t]he long-term treaty must rest upon a certain flexibility and room for development if it is to survive changes in circumstances and relations between the parties".[128]

Bjorge describes evolutionary interpretation as interpretation which is flexible and takes account of the "meaning acquired by the treaty terms when the treaty is applied".[129] He links this approach to the intention of the parties, arguing that evolutive interpretation aims to establish the "objectivized intention of the parties" at the time the treaty is interpreted through the application of articles 31-33 of the VCLT.[130] Peat and Windsor argue that, in the case of *Goodwin v United Kingdom*,[131] the ECtHR attempted to establish the intent of "a hypothetical speaker"[132] (the international community), as opposed to the intent of the original drafters of the ECHR.[133] In this way the court allowed for the interpretation of the ECHR to evolve with changing circumstances.[134]

Fitzmaurice describes evolutive interpretation as a mechanism which links article 31(3)(c) of the VCLT to article 31(1).[135] In other words, it acknowledges developments in international law applicable between the parties, thereby allowing for the constant evolution of the treaty's meaning. The International Court of Justice applied this approach in *Legal Consequences for States of the Continued Presence of South Africa in Namibia (South West Africa) notwithstanding Security Council Resolution 276 (1970)* [136] where the ICJ emphasised the necessity of considering important developments which occurred between the conclusion of a treaty and its interpretation.[137]

The IACtHR has affirmed the evolutive approach and held it to be consistent with the provisions of the VCLT.[138] In *Mapiripán Massacre vs Colombia* the IACtHR followed this

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[128] Alston & Goodman *International HR* 117-118.
[129] Bjorge "Vienna Rules" in *Interpretation in International Law* 191.
[130] Bjorge "Vienna Rules" in *Interpretation in International Law* 190-191.
[131] *Goodwin v United Kingdom* Application No 28957/95 (2002) ECtHR.
[132] Peat & Windsor "Playing the Game of Interpretation" in *Interpretation in International Law* 11.
[133] European Convention for the Protection of Human Rights and Fundamental Freedoms (adopted 4 November 1950, entered into force 3 September 1953, as amended by additional protocols) 213 UNTS 222 ("ECHR").
[134] Peat and Windsor explain that the ECtHR relied on increased "international consensus regarding the recognition of post-operative transsexuals" to interpret the ECHR so as to include an obligation on the state to recognise the post-operative gender of transsexual persons. The intent relied on was that of the international community as "hypothetical speaker". See Peat & Windsor "Playing the Game of Interpretation" in *Interpretation in International Law* 11.
[135] Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 751.
[136] *Legal Consequences for States of the Continued Presence of South Africa in Namibia (South West Africa) notwithstanding Security Council Resolution 276 (1970)*, Advisory Opinion, ICJ Reports (1971) 16.
[137] Advisory Opinion, ICJ Reports (1971) 16 para 53. See also Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 750.
[138] *Mapiripán Massacre vs Colombia* (Merits, Costs, Reparations) Series C No 134 (2005) IACtHR para 106.

evolutive approach and noted that "human rights treaties are live instruments, whose interpretation must go hand in hand with evolving times and current living conditions".[139] The idea of human rights treaties as "living instruments" is evident in the practice of a number of human rights tribunals, and is linked to an evolutive approach to interpretation.[140] This 'living instrument' approach is also referred to by some as "the concept of dynamic interpretation of treaties".[141] The IACtHR has also held that human rights treaties are "living instruments whose interpretations must consider the changes over time and present-day conditions".[142]

The jurisprudence of the ECtHR also refers to ECHR as a 'living instrument' from as early as 1978.[143] In *Tyrer v United Kingdom* the court held that "the [ECHR] is a living instrument which […] must be interpreted in the light of present-day conditions".[144] As Fitzmaurice points out, the living instrument concept has been "fundamental to the development of the ECtHR's concept of evolutive interpretation".[145]

In addition to the ECtHR and the IACtHR, the dynamic interpretation of treaties as living instruments is an approach followed by UN human rights bodies.[146] In relation to the International Covenant on Civil and Political Rights ("ICCPR"),[147] the Human Rights Committee ("HRC") has held that the ICCPR must be interpreted as a "living instrument" and that the rights therein should be applied "in the context and in the light of present-day conditions".[148] The Committee on the Elimination of Racial Discrimination has similarly referred to the International Convention on the Elimination of All Forms of Racial Discrimination[149] as a "living instrument" that "must be interpreted and applied taking into [account] the circumstances of contemporary society".[150]

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[139] *Mapiripán Massacre vs Colombia* para 106. See also Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 766; Arato "Treaty Interpretation over Time" in *Interpretation in International Law* 206.
[140] Çalı suggests that this approach falls within the scope of the overarching principle of effectiveness. See Çalı "Specialized Rules" in *Oxford Guide to Treaties* 538.
[141] Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 767.
[142] *The Right to Information on Consular Assistance in the Framework of the Guarantees of the Due Process of Law* Advisory Opinion OC-16/99, Series A No 16 (1999) IACtHR para 114.
[143] Arato "Treaty Interpretation over Time" in *Interpretation in International Law* 206.
[144] *Tyrer v United Kingdom* Application Number 5856/72 (1978) ECtHR para 31. See also Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 766.
[145] Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 766.
[146] Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 767.
[147] International Covenant on Civil and Political Rights (adopted 16 December 1966, entered into force 23 March 1976) 999 UNTS 171 ("ICCPR").
[148] *Judge v Canada* Communication No 829/1998, CCPR/C/78/D/829/1998 (2003) HRC para 10.3. See also Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 767.
[149] International Convention on the Elimination of All Forms of Racial Discrimination (adopted 21 December 1965, entered into force 4 January 1969) 660 UNTS 195.
[150] *Hagan v Australia* Communication No 26/2002 (2003) UNCERD para 7.3. See also CEDAW *General Recommendation No 25, on Article 4, Paragraph 1, of the Convention on the Elimination of All Forms of*

It is clear that human rights tribunals have advanced an approach to treaty interpretation which allows for meaning to evolve over time and according to circumstances, thereby ensuring that human rights treaties do not become obsolete.[151] Medina argues that this process of updating human rights to apply to new circumstances is a duty forming part of the judicial (and treaty body) mandate.[152] This "pragmatic and evolutive" approach allows these treaties to be applied to new problems which did not exist at the time of their drafting, thereby continuing to ensure the realisation of human rights in accordance with the object and purpose of protecting the human person (or persons) as rights bearer.[153]

3 3 3 3 The role of treaty bodies in interpretation

Treaty monitoring bodies have a particularly important role to play in the interpretation of human rights instruments. This is largely due to the fact that human rights treaties have individual (and collective) beneficiaries. The states which are parties to these instruments have an interest in interpreting human rights restrictively in order to limit their own obligations, which is one of the reasons why treaty bodies are necessary for appropriate interpretation of human rights treaties.[154] Treaty bodies fulfil the primary interpretive role in relation to human rights instruments and they are bound to do so in accordance with the VCLT.[155] In accordance with a teleological approach to interpretation, treaty monitoring bodies tend to rely primarily on the reference to "object and purpose" in the VCLT in support of their approach.[156]

As noted above,[157] human rights treaties are characterised by the generalised and abstract wording required in order to allow their provisions to find application in a diverse range of circumstances.[158] This requires greater interpretive efforts to determine how to apply these treaties to the specific political, social and economic circumstances at hand. Human rights treaty bodies therefore have a particularly important role in the interpretation of these treaties.[159]

Discrimination against Women, on Temporary Special Measures (2004) HRI/GEN/1/Rev7 282 para 3 that refers to the treaty as a "dynamic instrument".

[151] Sepúlveda *Nature of Obligations under the ICESCR* 83.

[152] Medina "Role of International Tribunals" in *Oxford Handbook of International HR Law* 651.

[153] Yeshanew *Justiciability of ESCR* 45.

[154] K Mechlem "Treaty Bodies and the Interpretation of Human Rights" (2009) 42 *Vanderbilt Journal of Transnational Law* 919.

[155] Mechlem (2009) *VJTL* 919 & 920.

[156] VCLT article 31(1).

[157] See 3 3 3 1 above on the nature of human rights treaties.

[158] Çalı "Specialized Rules" in *Oxford Guide to Treaties* 529 & 531; Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 748.

[159] Çalı "Specialized Rules" in *Oxford Guide to Treaties* 531.

Regarding the outputs of treaty bodies, Mechlem notes that these are included in the "subsequent practice" in article 31(3)(b) of the VCLT.[160] In this way the practice of treaty bodies plays an important role in interpretation. State practice remains significant as states' responses to the work of a treaty body can also constitute subsequent practice under article 31(3)(b).[161] Mechlem notes that states tend to rely on "interpretations offered by the treaty bodies in General Comments, the reporting guidelines, and the questions provided to them".[162]

Adherence to the VCLT rules in relation to treaty interpretation is important for the legitimacy of human rights treaty bodies.[163] Mechlem examines the interpretive work of treaty bodies and comes to three conclusions. Firstly, she notes that "methodological weaknesses compromise the comprehensibility, consistency, rationality, and legitimacy of a committee's output".[164] In other words, it is important for a treaty body to follow accepted methods of interpretation. Secondly, "a coherent body of interpretation" can be established by following the VCLT rules which require consideration of the text, context, and object and purpose of the treaty.[165] Finally, following clearly defined rules of interpretation ensures that the line between interpretation of existing provisions and development of new law is not crossed.[166] Applying consistent interpretive methodology in line with the VCLT therefore ensures that a treaty body remains within the boundaries of its mandate, and provides for more consistent and predictable interpretations that in turn allow States Parties to better predict the treaty body's approach to future problems. These benefits of methodological certainty therefore enhance the legitimacy of the treaty body's output.[167] The particular role of the CESCR and its interpretive methodology is examined below.

3 3 4 The interpretive methodology of the Committee

3 3 4 1 The role of the Committee in interpreting the Covenant

Before turning to the interpretation of the Covenant itself, it is necessary to discuss the role of the Committee and its supervisory mandate in relation to the Covenant. As noted in

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[160] Mechlem (2009) *VJTL* 920.
[161] 920.
[162] 920-921.
[163] 922.
[164] 945-946.
[165] 946.
[166] 946.
[167] In the context of the CESCR, Sepúlveda argues that indicators for legitimacy of the Committee's interpretations include: independence and expertise; diversity; continuity and coherence; predictability; efficiency; objectivity; reasonableness and practicability; and support in the work of other international bodies. See Sepúlveda *Nature of Obligations under the ICESCR* 91.

Chapter 1, the supervision of the Covenant was entrusted to the Economic and Social Council of the United Nations ("ECOSOC"), and the Committee was subsequently established by means of a resolution of the ECOSOC.[168] The Committee is unique in this respect as it has not been established in terms of the Covenant itself, and thus functions as a subsidiary of the ECOSOC.[169] Despite this formal distinction between the Committee and other treaty bodies, Sepúlveda notes that "it has performed its tasks on an equal footing with the treaty bodies and has achieved recognition and respect".[170] The Committee exercises its supervisory mandate primarily through its concluding observations, general comments, and views under the Optional Protocol to the ICESCR ("Optional Protocol").[171] These are briefly discussed below.

Concluding observations of the Committee are the outcome of the reporting process wherein States Parties participate in a "constructive and mutually rewarding dialogue" with the Committee.[172] Since 1992 the Committee has commented on State Parties' compliance with the obligations in the Covenant through concluding observations.[173] These are an important tool for identifying violations as well as structural issues hindering implementation of the Covenant.[174] Concluding observations also include detailed recommendations for the protection of Covenant rights. This practice provides insight into how the Committee envisages the protection of ESCRs under the Covenant in the context of a specific country.[175] Odello and Seatzu therefore note that this practice has contributed to "a wide interpretation of fundamental rights which can be applied to all ESCR".[176] While concluding observations are not judicial pronouncements, they are valuable in providing clarity on the

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[168] UN Economic and Social Council *Decision 1978/10* (3 May 1978); UN Economic and Social Council *Resolution 1985/17* (28 May 1985). See also E Riedel, G Giacca & C Golay "The Development of Economic, Social, and Cultural Rights in International Law" in E Riedel, G Giacca & C Golay (eds) *Economic, Social and Cultural Rights in International Law: Contemporary Issues and Challenges* (2014) 3 7; Craven MCR *The International Covenant on Economic, Social and Cultural Rights: A Perspective on its Development* (1995) 49. See Chapter 1, 1 5 3.

[169] Sepúlveda *Nature of Obligations under the ICESCR* 89-90; M Odello & F Seatzu *The UN Committee on Economic, Social and Cultural Rights: The Law, Process and Practice* (2013) 24.

[170] Sepúlveda *Nature of Obligations under the ICESCR* 90.

[171] Optional Protocol to the International Covenant on Economic, Social and Cultural Rights (adopted 10 December 2008, entered into force 5 May 2013) A/RES/63/117.

[172] Craven *The ICESCR: A Perspective on its Development* 66-67. See The reporting process is set out in CESCR *General Comment No 1: Reporting by States Parties* (27 July 1981) E/1989/22. See para 5 in relation to the Committee's constructive dialogue.

[173] Craven *The ICESCR: A Perspective on its Development* 57; Odello & Seatzu *The UN Committee on ESCR* 33.

[174] Odello & Seatzu *The UN Committee on ESCR* 184.

[175] Odello & Seatzu *The UN Committee on ESCR* 33. Mechlem (2009) *VJTL* 923.

[176] Odello & Seatzu *The UN Committee on ESCR* 33.

meaning and content of Covenant obligations.[177] Mechlem notes that although concluding observations are not legally binding, "only a handful of states" have noted this, indicating widespread acceptance of the Committee's authority and recognition of the Committee's interpretation through this mechanism.[178] In addition to assisting States Parties in the interpretation and application of the Covenant, concluding observations may also be a helpful source of information and interpretation for other UN human rights organs.[179]

General comments are another mechanism for developing the understanding of norms in the Covenant whereby the Committee assists States Parties in fulfilling their obligations through developing and clarifying its interpretation of Covenant provisions.[180] The Committee's general comments have been described as "an essential tool for the understanding, interpretation and application of economic, social and cultural rights".[181] While they do not address the application of the Covenant within a specific country or situation, the Committee's general comments contain a range of "conditions and practices that represent good examples for the application of ESCR in and by States Parties".[182] General comments are not legally binding, but the Committee's interpretations in this regard do have "considerable legal weight".[183] Many view a treaty body as "the most authoritative interpreter of the treaty it monitors", making general comments a reflection an authoritative interpretation of the Covenant.[184]

The Committee contributes to the interpretation of the Covenant through its views expressed in jurisprudence under the Optional Protocol.[185] Communications can be brought by individuals or groups alleging a violation of rights under the Covenant. The Committee can then consider the communication and provide its reasoned view on whether or not there has been a violation of the Covenant. Mechlem notes that this consideration of individual communications by treaty bodies "has a clearer legal character than the adoption of concluding observations".[186] Through interpreting the Covenant in relation to a specific case, the Committee is able to further "crystallize the normative content and scope of each

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[177] Riedel, Giacca & Golay "Development of ESCR" in *ESCR in International Law* 11; Mechlem (2009) *VJTL* 923. See also O De Schutter *International Human Rights Law: Cases, Materials, Commentary* 3 ed (2019) 920–925 on the nature and status of concluding observations of UN treaty bodies.
[178] Mechlem (2009) *VJTL* 921.
[179] Odello & Seatzu *The UN Committee on ESCR* 184.
[180] Craven *The ICESCR: A Perspective on its Development* 89, 90 & 92. Mechlem (2009) *VJTL* 927; Odello & Seatzu *The UN Committee on ESCR* 29 & 195.
[181] Odello & Seatzu *The UN Committee on ESCR* 195.
[182] Odello & Seatzu *The UN Committee on ESCR* 33.
[183] Craven *The ICESCR: A Perspective on its Development* 91. See also Mechlem (2009) *VJTL* 929.
[184] Mechlem (2009) *VJTL* 929; Sepúlveda *Nature of Obligations under the ICESCR* 88.
[185] Riedel, Giacca & Golay "Development of ESCR" in *ESCR in International Law* 11 & 35.
[186] Mechlem (2009) *VJTL* 924.

Covenant right".[187] The Optional Protocol remains a relatively recent development, although the Committee is well on its way to developing a body of jurisprudence in this regard.[188]

Finally, the Committee also delivers statements in relation to certain topics and issues of concern. These statements are the Committee's "responses to the contemporary developments affecting Covenant rights",[189] and they "clarify and confirm" the Committee's position in this regard.[190] While the Committee's statements do not have the same degree of persuasive legal weight afforded to the Committee's other outputs, they do provide an indication of how the Committee's envisages the application of the Covenant to contemporary challenges.[191] These statements therefore provide an important indication of "an emerging consensus" from the Committee on how the Covenant should be interpreted and applied.[192]

3 3 4 2 The Committee's methods of interpretation

In line with the approaches of other human rights treaty bodies and tribunals, the Committee's approach to the interpretation of the Covenant is guided by the provisions of the VCLT, with a particular emphasis on the object and purpose of the Covenant.[193] The Committee's application of the interpretive method(s) in the VCLT will be briefly illustrated below with reference to its general comments.

While much has been made of human rights treaty interpretation following a teleological approach, it must be noted that objective, textual (and contextual) interpretation still has an important role to play. The Committee has often referred to the ordinary meaning of individual terms in the Covenant as a starting point for interpretation.[194] With regard to

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[187] Riedel, Giacca & Golay "Development of ESCR" in *ESCR in International Law* 35.
[188] See, for example, S Liebenberg "Between Sovereignty and Accountability: The Emerging Jurisprudence of the United Nations Committee on Economic, Social and Cultural Rights under the Optional Protocol" (2020) 42 *Human Rights Quarterly* 48 48-84.
[189] S Liebenberg "South Africa and the International Covenant on Economic, Social and Cultural Rights: Deepening the Synergies" (2020) 3 *South African Judicial Education Journal* 13 27. See, for example, the Committee's statement on the COVID-19 pandemic: CESCR *Statement on the Coronavirus Disease (COVID-19) Pandemic and Economic, Social and Cultural Rights* (6 April 2020) E/C12/2020/1.
[190] Odello & Seatzu *The UN Committee on ESCR* 181.
[191] Liebenberg (2020) *South African Judicial Education Journal* 27.
[192] Liebenberg (2020) *South African Judicial Education Journal* 27.
[193] Sepúlveda *Nature of Obligations under the ICESCR* 84-85 and 87. See also Odello & Seatzu *The UN Committee on ESCR* 34. Mechlem, on the other hand, argues that the Committee has applied the provisions of the VCLT inconsistently. Mechlem (2009) *VJTL* 931.
[194] CESCR *General Comment No 15: The Right to Water (Arts. 11 and 12 of the Covenant)* (20 January 2003) E/C12/2002/11 para 3; CESCR *General Comment No 17: The Right of Everyone to Benefit from the Protection of the Moral and Material Interests Resulting from any Scientific, Literary or Artistic Production of Which He or She is the Author (Art 15, Para 1(c) of the Covenant)* (12 January 2006) E/C12/GC/17 para 17; CESCR *General Comment No 19: The Right to Social Security (Art 9 of the Covenant)* (4 February 2008) E/C12/GC/19 para 4; CESCR *General Comment No 23: The Right to Just and Favourable Conditions of Work (Article 7 of the Covenant)* (7 April 2016) E/C12/GC/23 para 6.

contextual or systematic interpretation, there are a number of instances where the Committee has referred to the broader context of the Covenant and has interpreted provisions of the Covenant in light of other provisions and the Covenant as a whole.[195] The context within which the Committee interprets the Covenant also extends to the field of human rights as a whole. The Committee regularly refers to the interdependence and indivisibility of rights, and will interpret individual Covenant rights in light of other international human rights norms.[196] In accordance with VCLT article 31(3)(c) the context considered by the Committee also includes the broader field of international law. The Committee will, for example, refer to definitions of certain terms from other international organisations.[197] This is an example of the conscious cross-fertilisation in human rights treaty interpretation referred to above.[198] The Committee has also referred to the history of the drafting of the Covenant as provided for in supplementary materials in article 32 of the VCLT.[199]

As would be expected, the Committee emphasises the object and purpose of the Covenant in its general comments, although the terminology of object and purpose is not always used.[200] In General Comment 3, for example, the Committee notes that it is an objective of the Covenant "to establish clear obligations for States parties in respect of the full realization of the rights in question".[201] General Comment 19 refers to the preamble of the Covenant and notes the importance of the principle of human dignity contained therein.[202] The Committee's frequent reliance on human dignity confirms that it is a central object and purpose of the Covenant.[203] The reliance on object and purpose, including human dignity, in the Committee's interpretive methodology underscores the *pro homine*

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[195] CESCR *General Comment No 13: The Right to Education (Art 13 of the Covenant)* (8 December 1999) E/C12/1999/10 para 51; CESCR *General Comment No 15* para 29; CESCR *General Comment No 18: The Right to Work (Art 6 of the Covenant)* (6 February 2006) E/C12/GC/18 para 8.

[196] CESCR *General Comment No 4: The Right to Adequate Housing (Art 11 (1) of the Covenant)* (13 December 1991) E/1992/23 para 7; CESCR *General Comment No 12: The Right to Adequate Food (Art 11 of the Covenant)* (12 May 1999) E/C12/1999/5 para 4; CESCR *General Comment No 15* para 3; CESCR *General Comment No 18* para 8; CESCR *General Comment No 22: The Right to Sexual and Reproductive Health (Article 12 of the Covenant)* (2 May 2016) E/C12/GC/22 para 9-10.

[197] See for example *General Comment No 22* para 6 where the Committee refers to the WHO definition of "sexual health". See also CESCR *General Comment No 13* para 9; CESCR *General Comment No 15* para 4.

[198] Fitzmaurice "Interpretation" in *Oxford Handbook of International HR Law* 754. See 3 3 3 1 above.

[199] See CESCR *General Comment No 14: The Right to the Highest Attainable Standard of Health (Art 12 of the Covenant)* (11 August 2000) E/C12/2000/4 para 4; CESCR *General Comment No 17* para 13.

[200] See CESCR *General Comment No 4* para 7.

[201] CESCR *General Comment No 3: The Nature of States Parties' Obligations (Art 2, para 1 of the Covenant)* (14 December 1990) E/1991/23 para 9.

[202] CESCR *General Comment No 19* para 22.

[203] CESCR *General Comment No 4* para 7; CESCR *General Comment No 12* para 4; CESCR *General Comment No 15* para 29; CESCR *General Comment No 19* para 22.

approach, requiring an "extensive or inclusive interpretation" for the benefit of the rights-bearer.[204]

As noted above, the principle of effectiveness and the evolutive approach are derived from the object and purpose of human rights treaties.[205] The Committee's interpretive methodology also demonstrates this. For example, the principle of effectiveness is evident in the Committee's statement that an interpretation of a right in the Covenant should not "depriv[e] its correlative obligation of all meaningful content".[206] In other words, to interpret a right so restrictively that there is no substantive obligation on States Parties to the Covenant would render the right meaningless. This would offend the principle of effectiveness which demands that every provision of a treaty is meaningful and effective. Similarly, the Committee has stated that the right to culture cannot be interpreted so as to undermine or destroy other rights in the Covenant, thereby rendering them meaningless and ineffective.[207] The Committee also emphasises the need for the Covenant to have practical effect for the benefit of the individual (or collective) rights-bearer.[208]

The evolutive approach is also evident in the Committee's work. Sepúlveda notes that the Committee has provided a contemporary interpretation of the Covenant in line with developments in ESCRs.[209] The Committee plays an important role in promoting changes in perception and "in creatively interpreting the Covenant by incorporating such changes in perception into the protection afforded by the Covenant".[210] The Committee recognises that certain notions evolve with developments in society and that the interpretation of Covenant must reflect this.[211] In its general comments the Committee has recognised the evolution of the notions of "family", "health" and "work" and has given these terms contemporary interpretations.[212] The Committee is thus sensitive to the evolution of "assumptions […]

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[204] See for example CESCR *General Comment No 12* para 6. See also Sepúlveda *Nature of Obligations under the ICESCR* 85.
[205] See 3 3 3 2 above.
[206] CESCR *General Comment No 3* para 9; CESCR *General Comment No 13* para 44; CESCR *General Comment No 14* para 31; CESCR *General Comment No 17* para 10; CESCR *General Comment No 18* para 20. See also Sepúlveda *Nature of Obligations under the ICESCR* 85.
[207] CESCR *General Comment No 21: The Right of Everyone to Take Part in Cultural Life (Art 15, para 1(a) of the Covenant)* (21 December 2009) E/C12/GC/21 para 20.
[208] CESCR *General Comment No 9: The Domestic Application of the Covenant* (3 December 1998) E/C12/1998/24 para 11; CESCR *General Comment No 17* para 20.
[209] Sepúlveda *Nature of Obligations under the ICESCR* 86.
[210] Sepúlveda also suggests that "[a]n instrument aimed at the protection of economic, social and cultural rights is more exposed to changes in perception in society and economic, social and political conditions than are civil and political rights instruments". See Sepúlveda *Nature of Obligations under the ICESCR* 83.
[211] Sepúlveda *Nature of Obligations under the ICESCR* 86.
[212] CESCR *General Comment No 4* para 6; CESCR *General Comment No 12* para 1; CESCR *General Comment No 14* para 10; CESCR *General Comment No 23* para 4. See also CESCR *General Comment No 17* para 7; CESCR *General Comment No 21* para 9.

commonly accepted in 1966 when the Covenant was adopted",[213] as well as the evolution of human rights standards, treaties and jurisprudence.[214]

Ultimately, the rights in the Covenant must be interpreted in order to "[give] them full effect in light of present-day conditions".[215] The Committee's teleological approach has led to a broadening of its interpretation of Covenant rights and, therefore, an expansion of States Parties' obligations. Sepúlveda argues that this is "absolutely in line with the rules for the interpretation of treaties in general international law as well as with the work of other human rights supervisory bodies".[216]

The Committee's interpretation of the Covenant in its general comments is in line with the provisions of the VCLT. However, the application of the VCLT is not explicit, and the Committee rarely identifies its interpretive methodology. Some authors have suggested that more transparency and recognition of its methodology could increase the legitimacy (and predictability) of the Committee's interpretations of the Covenant.[217] The legitimacy of the Committee's interpretations is ultimately essential for the effectiveness of the Covenant itself. As Sepúlveda notes "[t]he extent to which States Parties view the Committee's interpretation as having 'legitimacy' will determine both how inclined they are to comply and the cost of non-compliance (in terms of 'mobilisation of shame')".[218] For the purposes of this dissertation it is therefore important to apply the accepted methods of interpretation discussed above in order to give full effect to provisions of the Covenant.

3 3 5 Integrating environmental considerations into the Covenant through interpretation

The interpretation of international treaties involves narrowing down the numerous possible meanings through an application of the accepted rules of interpretation. The VCLT sets out these rules, requiring a good faith interpretation which considers ordinary meaning, context, and object and purpose.[219] Given the nature of human rights treaties, certain methods of interpretation are particularly important for human rights tribunals and treaty bodies. Human rights treaty interpretation has emphasised interpretation "in the light of [the treaty's] object and purpose".[220] This has led to a preference for teleological interpretation as well as the related *pro homine* approach; principle of effectiveness; and evolutive

[213] CESCR *General Comment No 4* para 6.
[214] CESCR *General Comment No 18* para 15; CESCR *General Comment No 22* para 1.
[215] Sepúlveda *Nature of Obligations under the ICESCR* 87.
[216] Sepúlveda *Nature of Obligations under the ICESCR* 87.
[217] Sepúlveda *Nature of Obligations under the ICESCR* 89; Mechlem (2009) *VJTL* 945-946.
[218] Sepúlveda *Nature of Obligations under the ICESCR* 89.
[219] VCLT article 31.
[220] VCLT article 31(1).

approach. As demonstrated above,[221] the interpretive methodology applied by the Committee is consistent with the provisions of the VCLT. Adherence to these accepted rules of interpretation is necessary for the legitimacy of an interpretation and for subsequent compliance with the obligations of the Covenant.

Any integration of environmental considerations through interpretation of the Covenant must therefore comply with the interpretive methods set out in this chapter. While the overarching teleological approach to interpretation forms the basis for the proposed interpretations in this dissertation, the principle of effectiveness and the evolutive approach to human rights treaty interpretation are of particular importance. These elements of teleological interpretation affirm that "new, clear, potential, or actual threats that the changes occurring in the world pose, necessitate a response, if the object and purpose of human rights law is not to be undermined".[222] Given the rapidly changing condition of the environment and the vast extent of the threats to ESCRs posed by widespread environmental degradation and climate change,[223] these interpretive methods provide clear support for the integration of environmental considerations within the Covenant. In fact, the application of the teleological approach demands that relevant environmental considerations are taken into account, particularly in light of principle of effectiveness and the evolutive approach.

In conclusion, the integration of environmental considerations within the Covenant must adhere to the rules of the VCLT and the accepted methods of interpretation applied by human rights tribunals.[224] A failure to do so would threaten the legitimacy of the Committee as well as the cooperation and support of States Parties to the Covenant. In other words, the Covenant cannot be (mis)interpreted to impose environmental obligations which are outside the scope of the Covenant as understood according to the relevant rules and methodology. However, this dissertation aims to apply the methods of interpretation set out above to show that, in order for the Covenant to evolve with changes in society and to be effective in light of present-day circumstances, environmental considerations must be regarded as an essential part of the rights and obligations in the Covenant.[225]

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[221] See 3 3 4 2.
[222] Medina "Role of international tribunals" in *Oxford Handbook of International HR Law* 655.
[223] See Chapter 2, 2 2 1.
[224] On the legitimacy and necessity of human rights tribunals hearing environmental matters, see D Shelton "Legitimate and Necessary: Adjudicating Human Rights Violations related to Activities Causing Environmental Harm or Risk" (2015) 6 *JHRE* 139 139-155.
[225] See Chapter 7, 7 2 for a synthesis of the contribution of these interpretive methods to greening States Parties' obligations.

3 4 Conclusion

This chapter has outlined an interpretive methodology for greening States Parties' obligations under the Covenant. The human rights approaches to environmental protection illustrate how various scholars have understood the relationship between the environment and human rights. Given the burgeoning threat that environmental degradation poses to ESCRs, the continued protection and realisation of these rights compels a consideration of the environment in the interpretation of the Covenant. This dissertation aims to interpret States Parties' obligations under the Covenant in light of environmental considerations in order to ensure the continued effective realisation the rights in the Covenant. This interpretation or "greening" of the Covenant must comply with accepted methods of interpretation. The applicable interpretive methods of interpretation for treaty interpretation are set out in the VCLT. In particular, human rights treaties emphasise teleological interpretation as well as the principle of effectiveness and the evolutive approach. These methods of interpretation support, and indeed require, an interpretation of States Parties' obligations under the Covenant that appropriately incorporates the environment.

This dissertation refers to a selection of principles of IEL to guide the systematic greening of States Parties' obligations under the Covenant. These principles of IEL are investigated in detail in the following chapter. The principles are later applied to key elements of States Parties' obligations under article 2(1) so as to determine how these obligations should be interpreted in accordance with the interpretive methods examined in this chapter.[226]

[226] See Chapters 5 and 6.

CHAPTER 4:
PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW

4 1 Introduction

It has been argued above that the Committee can achieve a deeper and more systematic integration of environmental considerations in its interpretive mandate under the Covenant by drawing on existing principles of international environmental law ("IEL"). This chapter investigates how principles of IEL can provide guidance on how environmental problems can be appropriately understood and regulated. These principles of IEL will later be used to guide the greening of States Parties' obligations under article 2(1) in order to ensure the effective protection and realisation of Covenant rights.[1] The purpose of referring to these principles of IEL is not to impose rules of environmental law onto the Covenant, but rather to use the principles of IEL as a guide to illustrate the ways in which the Covenant should be interpreted to integrate environmental considerations. Any such interpretation of the Covenant must be consistent with the interpretive methodology set out in Chapter 3 above.

In the field of international environmental law and policy, developments in the 1970s resulted in "an increasingly prominent profile" for environmental principles as policy concepts.[2] Various international declarations and agreements began to list environmental principles.[3] Scotford argues that these international instruments are "attractive sources of principles in environmental law [due to] the international consensus or authority they represent".[4] For scholars, environmental principles create some commonality and potential for coherence, and "provide a collective identity"[5] within a field of "novel and speedy regulatory developments".[6] The principles of IEL therefore provide an indication of the underlying values and guiding concepts that have shaped approaches to the environment in international law. Understanding these principles is important for understanding how to integrate environmental considerations within the Covenant in order to promote the object

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[1] See Chapters 5 and 6 where the principles in this chapter are used as a guide for the greening of States Parties' obligations under article 2(1).
[2] E Scotford *Environmental Principles and the Evolution of Environmental Law* (2017) 32. See also GJ Martin "Principles and Rules" in L Krämer & E Orlando (eds) *Principles of Environmental Law* (2018) 13 13. Martin notes that the Rio Declaration went so far as to initiate the "fundamentalization" of some of these principles, understanding them as rights or fundamental freedoms.
[3] Declaration of the United Nations Conference on the Human Environment (Stockholm, June 1972) A/CONF48/14/REV1 ("Stockholm Declaration") and Rio Declaration on Environment and Development (Rio de Janeiro, June 1992) A/CONF151/26 ("Rio Declaration"); Scotford *Environmental Principles* 32 & 71.
[4] Scotford *Environmental Principles* 74. See also 69 where Scotford suggests that the prominence of environmental principles can also be attributed to the tendency of states to prefer vague principles in multilateral agreements "for reasons of political expediency".
[5] Dupuy & Viñuales *International Environmental Law* 59.
[6] Scotford *Environmental Principles* 34; P Dupuy & JE Viñuales *International Environmental Law* (2018) 59.

and purpose of the Covenant in the face of increasing environmental threats.[7] Drawing on these principles also contributes to the harmonisation of IEL and human rights law. In the context of the interpretation of the Covenant it is important to note that relying on *principles* of IEL, as opposed to rules, contributes to their usefulness as they are amendable to application in a variety of contexts and are not overly prescriptive in their content.

This chapter begins by analysing the nature of environmental principles in the international law context. It will then examine the meaning and status of certain principles of IEL. As there is no authoritative list of principles, and an assessment of each identified principle of IEL is beyond the scope of this research, those environmental principles most widely recognised have been selected. The individual principles considered in this chapter include: sustainable development and its related elements (the principle of integration, sustainable use, and inter- and intra-generational equity); the concept of prevention and the related principles of no-harm, sovereignty over natural resources, prevention and precaution; the polluter pays principle; and the principle of common but differentiated responsibilities ("CBDR").

4 2 The nature of environmental principles in international law

Before discussing individual environmental principles, it is necessary to establish what is meant by principles. Dupuy and Viñuales make the important distinction between a principle as a "type of statement or formulation of a norm" and a *legal* principle as "the legal foundation of a norm".[8] The former, a principle in the ordinary sense of the word, could be found in a soft-law instrument but have no legal character. The nomenclature of environmental principles can lead to an assumption regarding their legal status as *legal* principles without any interrogation.[9] As the principles do not in fact form an established group, each principle must be examined individually in order to determine its legal nature or status.[10]

It can also be useful to refer to certain environmental norms as "concepts". Dupuy and Viñuales describe rules, principles and concepts according to their degree of generality or particularity.[11] They explain that concepts can be thought of as "guiding norms that are

[7] With regard to environmental threats, see Chapter 2, 2 2 1. On interpretation and object and purpose, see Chapter 3, 3 3 3 2 1.
[8] Dupuy & Viñuales *International Environmental Law* 58.
[9] Scotford *Environmental Principles* 45-46 & 265. See also Scotford *Environmental Principles* 61 where it is noted that some jurists simply make "bold claims that environment (sic) principles are legal principles in international environmental law because it should be so".
[10] The term 'principle' will be used to refer to the ordinary meaning of the term and is not a description of the legal nature or status of the concept.
[11] Dupuy & Viñuales *International Environmental Law* 59.

implemented by principles, which, in turn, are realised by rules".[12] Maintaining a distinction between environmental principles generally and *legal* principles, Beyerlin and Marauhn describe three layers of environmental law concepts: "a thin layer consisting of highly abstract ideals, a thicker one with less abstract concepts, and a huge one with concrete norms".[13] They describe the concepts of international solidarity and justice as examples of the abstract ideals which form the "ethical roots" of the less abstract concepts usually termed 'principles'.[14]

Scholars have noted the difficulty in differentiating between principles and rules. Martin demonstrates that environmental principles and rules can be distinguished by source, by form, and by function.[15] The clearest distinction between rules and principles can be seen when one examines their function.[16] Beyerlin and Marauhn point out that both rules and principles have a normative "steering effect" on states.[17] Rules primarily relate to specific action which must be taken or avoided,[18] and they may also distribute rights and organise information.[19] Principles, on the other hand, are more general in nature and are designed to find application in various contexts.[20] They are not directed at specific behaviour, but have a "symbolic, orienting and thus political function".[21] Principles interact with rules by guiding the creation of new rules; the influencing the interpretation of existing rules, and guiding decision-making in the absence of specifically applicable rules.[22] Sands, Peel, Aguilar and Mackenzie distinguish between rules and principles with reference to the *Gentini* case which describes rules as practical and binding; and principles as an expression of a general truth and theoretical basis for action.[23] In this view, rules are considered as the practical formulation of principles, and the application of principles to "the varying circumstances of

[12] Dupuy & Viñuales *International Environmental Law* 59.
[13] Beyerlin & Marauhn *International Environmental Law* 34.
[14] Beyerlin & Marauhn *International Environmental Law* 34.
[15] Martin "Principles and Rules" in *Principles of Environmental Law* 19. Martin notes, however, that "it remains impossible to find the one criterion which would give the researcher the certainty of an uncontested qualification".
[16] Martin "Principles and Rules" in *Principles of Environmental Law* 17; B Milligan & R Macrory "The History and Evolution of Legal Principles Concerning the Environment" in L Krämer & E Orlando (eds) *Principles of Environmental Law* (2018) 23 26.
[17] U Beyerlin & T Marauhn *International Environmental Law* (2011) 37.
[18] Beyerlin & Marauhn *International Environmental Law* 37; Martin "Principles and Rules" in *Principles of Environmental Law* 17.
[19] Martin "Principles and Rules" in *Principles of Environmental Law* 17.
[20] Milligan & Macrory "History and Evolution" in *Principles of Environmental Law* 24.
[21] Martin "Principles and Rules" in *Principles of Environmental Law* 17.
[22] Milligan & Macrory "History and Evolution" in *Principles of Environmental Law* 26; Beyerlin & Marauhn *International Environmental Law* 37; Martin "Principles and Rules" in *Principles of Environmental Law* 18.
[23] P Sands, J Peel, AF Aguilar & R Mackenzie *Principles of International Environmental Law* 4 ed (2018) 199. See *Gentini case (Italy v Venezuela)* 10 RIAA 551 (1903).

practical life".[24] In relation to environmental law, principles are also seen to function as a "connective glue" or as general norms providing coherence and stability to a complex and rapidly evolving system.[25]

This particular nature of principles described above is what makes them useful for the greening of States Parties' obligations under the Covenant. They do not prescribe precisely what action must be taken, allowing context-specific flexibility. It is therefore possible to apply them within the specific scope of Covenant, to the extent that they are consistent with the interpretive methodology in Chapter 3. The principles can thus have a "steering effect"[26] and influence the interpretation of Covenant obligations and related decision-making.[27] The flexibility of these principles also allows for the appropriate application of each principle, where appropriate, to the country-specific context of individual States Parties.[28]

Before turning to the meaning and status of specific principles of IEL, it is important to note that determining the precise legal status of environmental principles is by no means straightforward. Scotford attributes the legal ambiguity of some environmental principles in IEL to four factors:

> "(1) they are contained in instruments of soft law and so have uncertain normative status; (2) they represent between them very different kinds of ideas about environmental protection; (3) their meanings are unclear or contested; and (4) they constitute a shifting but usually select group of principles out of all 'principles' so-called in these [international soft law] instruments".[29]

While it is not possible to go into these factors in detail here,[30] it is sufficient to note that there is no clarity on the legal status of many of the principles of IEL founded in international soft law instruments.[31] This lack of clarity is also a result of the nebulous and contested nature of international 'soft law' and its imprecise distinction from 'hard law'.[32] Soft law declarations and principles may provide the "underpinnings for international treaty

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[24] Sands et al *Principles of IEL* 199 with reference to *Gentini case (Italy v Venezuela)* 10 RIAA 551 (1903).
[25] Milligan & Macrory "History and Evolution" in *Principles of Environmental Law* 26.
[26] Beyerlin & Marauhn *International Environmental Law* 37.
[27] Milligan & Macrory "History and Evolution" in *Principles of Environmental Law* 26; Beyerlin & Marauhn *International Environmental Law* 37; Martin "Principles and Rules" in *Principles of Environmental Law* 18.
[28] See Sands et al *Principles of IEL* 199 with reference to *Gentini case (Italy v Venezuela)* 10 RIAA 551 (1903).
[29] Scotford *Environmental Principles* 76.
[30] See Scotford *Environmental Principles* 76-84 for a detailed discussion of each of these reasons for the legal ambiguity of environmental principles.
[31] Scotford points out that it is not possible definitively determine "what an environmental principle is or means". See Scotford *Environmental Principles* 5.
[32] On the nature of soft law see, for example, A Boyle "Soft Law in International Law-making" in M D Evans (ed) *International Law* 5 ed (2018) 119 119-137; C Redgwell "International Environmental Law" in M D Evans (ed) *International Law* 5 ed (2018) 675 686-687; T Mensah "Soft Law: A Fresh Look at an Old Mechanism" (2008) 38 *Environmental Policy and Law* 50 50-56; R Wallace & O Martin-Ortega *International Law* 6 ed (2009) 31-32; A Aust *Handbook of International Law* 2 ed (2010) 11; A Cassese *International Law* 2 ed (2005) 197;

instruments" and contribute to the development of customary international law.[33] Although non-binding, these soft law sources may therefore have a significant impact on international law, including its interpretation.[34] For rapidly developing areas such as IEL, soft law is also important for the articulation of guidelines, rules and standards where consensus has not yet been reached or treaty negotiation is not yet finalised.[35] Sands, Peel, Aguilar and Mackenzie point out the difficulty of determining the meaning and status of each principle or rule of IEL and attribute this to "the absence of clear judicial authority" and the presence of "conflicting interpretations under state practice".[36] In determining the legal status of principles of IEL it is essential to consider each principle on its own terms:

> "Any effort to identify general principles and rules of international environmental law must necessarily be based on a considered assessment of state practice […] as well as the growing number of decisions of international courts and tribunals".[37]

Beyerlin and Marauhn, for example, avoid the language of principles and choose to examine each environmental concept individually in order to determine its legal status as a rule, principle, or soft law concept or policy.[38] Environmental principles have no "pre-programmed legal identities" and the status of each 'principle' set out below will therefore be examined separately.[39] It is important to note that although the legal status of these principles of IEL is relevant in relation to their persuasive force, it is by no means determinative of the usefulness of these principles in guiding the interpretation of the Covenant, which is the focus of this dissertation.[40] The discussion below considers the meaning and status of the principles specifically in the context of IEL. Their relevance for the Covenant (and potentially human rights law in general) is reviewed in Chapter 7.[41]

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[33] Mensah (2008) *Environmental Policy and Law* 52; Wallace & Martin-Ortega *International Law* 32; Sands et al *Principles of IEL* 116; Boyle "Soft Law in International Law-making" in *International Law* 120-121; Aust *Handbook of International Law* 11.

[34] Mensah notes that "soft law principles provide incentives and tools to courts and tribunals in interpreting and applying international treaties, as well as national laws and constitutional instruments". See Mensah (2008) *Environmental Policy and Law* 54.

[35] See, for example, Mensah (2008) *Environmental Policy and Law* 53 where the author explains that some soft law sources are given binding effect through incorporation by reference in later treaties.

[36] Sands et al *Principles of IEL* 198.

[37] Sands et al *Principles of IEL* 200-201.

[38] Beyerlin & Marauhn *International Environmental Law* 38.

[39] Scotford *Environmental Principles* 6.

[40] It is perhaps useful to note that although this chapter emphasises the status of these principles of IEL within customary international law, a number of the principles may also function as binding obligations within the context of specific environmental treaty regimes.

[41] See Chapter 7, 7 3.

4 3 The principles of international environmental law

Although they are often referred to collectively, there is no single authoritative list or group of environmental principles in IEL.[42] Krämer and Orlando suggest that an authoritative indication of such a definitive list "can be found in non-binding texts […] as well as in the various attempts by expert groups and legal scholars to adopt compendia of environmental law principles".[43] While international soft law does provide a number of such lists, it fails to address the issue of inconsistent and diverging lists.[44] It is unclear whether each principle mentioned in such lists should be considered part of the corpus of environmental principles, or whether only those appearing in multiple lists should be included.[45]

The aforementioned lists are, of course, not the only sources for environmental principles in international law. As will be seen below, a number of individual environmental principles have developed through the decisions of international courts and tribunals,[46] and through various multi-lateral environmental agreements.[47] Combined with the various soft law lists of principles, these have led to a proliferation of principles beyond the scope of this study. Those most widely recognised, and with the most prominent status in international law, will therefore be focused on in this chapter.

The environmental principles chosen for this study, and elaborated on in more detail below, are: (1) sustainable development and the related principles of integration, sustainable use, intergenerational equity, and intragenerational equity; (2) prevention and the related principles of no-harm and sovereignty over natural resources; the preventive principle; and the precautionary principle; (3) the polluter pays principle; and (4) the principle of common but differentiated responsibilities ("CBDR").

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[42] Scotford *Environmental Principles* 68 & 70; L Krämer & E Orlando "Introduction to Volume VI" in L Krämer & E Orlando (eds) *Principles of Environmental Law* (2018) 1 2.
[43] Krämer & Orlando "Introduction" in *Principles of Environmental Law* 2.
[44] See Scotford *Environmental Principles* 71-73.
[45] Lists of environmental principles include, for example: soft law declarations (such as the Brundtland Report; Stockholm Declaration and Rio Declaration) and documents drafted by certain international bodies or organisations, such as the International Law Association's New Delhi Declaration on the Principles of International Law Relating to Sustainable Development (New Delhi, August 2002) A/CONF199/8 ("New Delhi Declaration") and the Organisation for Economic Co-operation and Development's Environmental Principles and Concepts (1995) OCDE/GD(95)124 ("OECD Environmental Principles"). See Scotford *Environmental Principles* 72-73.
[46] See, for example, Sands et al *Principles of IEL* 206-207 & 211.
[47] See, for example, Dupuy & Viñuales *International Environmental Law* 68 & 71.

4 3 1 Sustainable development

4 3 1 1 Introduction

The origins of sustainable development are evident in the 1972 Stockholm Declaration on the Human Environment ("Stockholm Declaration") which recognises the interrelationship of development and the environment. Despite the absence of the term itself in the Stockholm Declaration, the elements of sustainable development are encapsulated in the following objective:

> "To defend and improve the human environment for present and future generations has become an imperative goal for mankind – a goal to be pursued together with, and in harmony with, the established and fundamental goals of peace and of worldwide economic and social development".[48]

This signals some of the early articulations of the elements of integration and of inter- and intra-generational equity which later became central to the concept of sustainable development.[49] The term 'sustainable development' first appeared in a 1975 decision of the UN Environment Programme ("UNEP") which stated the following:

> "Environmental management implies sustainable development of all countries, aimed at meeting basic human needs without transgressing the outer limits set to man's endeavours by the biosphere".[50]

Sustainable development subsequently appeared in the 1980 World Conservation Strategy of the International Union for Conservation of Nature and Natural Resources ("IUCN").[51] However, widespread recognition of sustainable development and definition of the concept began with the creation of the World Commission on Environment and Development ("Brundtland Commission") in 1983.[52]

In 1987 the Report of the World Commission on Environment and Development ("Brundtland Report") provided the first definition of sustainable development as

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[48] Stockholm Declaration proclamation 6.

[49] These elements of sustainable development are discussed in detail at sections 4 3 1 2 to 4 3 1 5 below. See, for example, Stockholm Declaration principles 1, 11 & 13.

[50] UNEP Governing Council (2 May 1975) Decision 20(III) para II.9(b). See NJ Schrijver *The Evolution of Sustainable Development in International Law: Inception, Meaning and Status* (2008) 47.

[51] International Union for Conservation of Nature and Natural Resources *World Conservation Strategy: Living Resource Conservation for Sustainable Development* (1980). See also Schrijver *Evolution of Sustainable Development* 46-47; Tladi D *Sustainable Development in International Law: An Analysis of Key Enviro-Economic Instruments* (2007) 16 footnote 19; Beyerlin & Marauhn *International Environmental Law* 74.

[52] AC Kiss & D Shelton *International Environmental Law* (2004) 51; Schrijver *Evolution of Sustainable Development* 47 & 64. See also UNGA *Process of Preparation of the Environmental Perspective to the Year 2000 and Beyond* (19 December 1983) A/RES/38/161.

development that "meets the needs of the present without compromising the ability of future generations to meet their own needs".[53] The Report goes on to say that

> "[S]ustainable development requires meeting the basic needs of all and extending to all the opportunity to fulfil their aspirations for a better life. A world in which poverty is endemic will always be prone to ecological and other catastrophes".[54]

The UN General Assembly affirmed the centrality of sustainable development in a 1987 resolution wherein it welcomed the Brundtland Report and held that sustainable development "should become a central guiding principle of the United Nations, Governments and private institutions, organizations and enterprises".[55]

Following the Brundtland Report, the UN Conference on Environment and Development ("Rio Conference") was convened in 1992.[56] Barral argues that the Rio Conference constitutes "[t]he most fundamental landmark in sustainable development's history".[57] The conference resulted the Rio Declaration on Environment and Development ("Rio Declaration") which made a substantial contribution to the articulation and conceptualisation of sustainable development and environmental law through its 27 principles.[58] Echoing the definition of sustainable development in the Brundtland Report, the Rio Declaration states that "[t]he right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations".[59] The Rio Conference resulted in widespread endorsement of sustainable development as the "unavoidable paradigm of environment/development relations".[60]

Following the Rio Conference, many significant multi-lateral environmental agreements were adopted, and the integration of environmental considerations in non-environmental treaties became more common.[61] References to sustainable development, or elements

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[53] Report of the World Commission on Environment and Development: Our Common Future (1987) A/42/427 para 27. This approach to sustainable development is not without its critics: see for example the criticism of the Brundtland Report's optimism in M McCloskey "The Emperor Has No Clothes: The Conundrum of Sustainable Development" (1999) 9 *Duke Environmental Law & Policy Forum* 153 153–59.
[54] Brundtland Report para 27.
[55] D Moellendorf "A Right to Sustainable Development" (2011) 94 *The Monist* 433 434. See also UNGA *Report of the World Commission on Environment and Development* (11 December 1987) A/RES/42/187.
[56] Kiss & Shelton *International Environmental Law* 52 & 55.
[57] Barral (2012) *EJIL* 379.
[58] See Rio Declaration on Environment and Development (Rio de Janeiro, June 1992) A/CONF151/26. Barral notes that 12 of the 27 principles expressly mention sustainable development. See Barral (2012) *EJIL* 379.
[59] Rio Declaration, principle 3. See also UNGA *Declaration on the Right to Development* (4 December 1986, A/RES/41/128).
[60] Barral (2012) *EJIL* 379. See also Beyerlin & Marauhn *International Environmental Law* 14.
[61] Schrijver *Evolution of Sustainable Development* 71-76; Beyerlin & Marauhn *International Environmental Law* 19-22 & 74-75; Kiss & Shelton *International Environmental Law* 58-62.

thereof, became more widespread in international instruments and the concept of sustainable development gained substantial currency in this period. [62]

The understanding of the concept of sustainable development later progressed from a mechanism to address an environment-development dichotomy to the idea of balancing social development, economic development and environmental protection.[63] These three dimensions were included in the 1995 Copenhagen Declaration on Social Development which held that "economic development, social development and environmental protection are interdependent and mutually reinforcing components of sustainable development, which is the framework for our efforts to achieve a higher quality of life for all people".[64] The concept of sustainable development was once again affirmed in the 2000 UN Millennium Declaration which declares that natural resources should be managed prudently in accordance with sustainable development; that the "immeasurable riches" of nature should be passed on to our descendants; and that unsustainable production and consumption threatens present and future generations.[65] In Part IV of the Declaration support for the "principles of sustainable development" is affirmed.

In 2002 the World Summit on Sustainable Development ("WSSD") was held in Johannesburg with an emphasis on reviewing compliance with existing norms and obligations and on integrating environmental, social and economic objectives.[66] It has been suggested that the resultant plan of implementation shifted the focus from concerns related to environmental protection, to "an integrated environmental, social and development agenda".[67] At the 2012 UN Conference on Sustainable Development this conception of sustainable development was reiterated as states acknowledged "the need to further mainstream sustainable development at all levels, integrating economic, social and environmental aspects and recognizing their interlinkages, so as to achieve sustainable development in all its dimensions".[68] More recently, the UN adopted the Sustainable

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[62] Beyerlin & Marauhn *International Environmental Law* 74; Kiss & Shelton *International Environmental Law* 58.
[63] Barral (2012) *EJIL* 379; Marong (2003) *GIELR* 28; S Atapattu "The Paris Agreement and Human Rights: Is Sustainable Development the 'New Human Right'?" (2018) 9 *JHRE* 68 75.
[64] Copenhagen Declaration on Social Development (Copenhagen, March 1995) A/CONF166/9 article 6. See also Atapattu (2018) *JHRE* 76.
[65] UNGA *United Nations Millennium Declaration* (18 September 2000) A/RES/55/2. See also Beyerlin & Marauhn *International Environmental Law* 21.
[66] See Johannesburg Declaration on Sustainable Development (Johannesburg, September 2002) A/CONF199/20. See also Schrijver *Evolution of Sustainable Development* 94; Beyerlin & Marauhn *International Environmental Law* 23.
[67] MC Cordonier Segger & A Khalfan *Sustainable Development Law: Principles, Practices, and Prospects* (2004) 28. See Draft Plan of Implementation of the World Summit on Sustainable Development (Johannesburg, June 2002) A/CONF199/L1.
[68] The Future We Want (27 July 2012) A/RES/66/288 para 3.

Development Goals ("SDGs") and affirmed that the goals are "integrated and indivisible and balance the three dimensions of sustainable development: the economic, social and environmental".[69]

Despite the widespread awareness of the concept today, sustainable development has no authoritative definition and its content "is still subject to significant controversies and uncertainty".[70] Barral points out that the general nature of the concept, which facilitates its application in a variety of circumstances, "carries with it the inconvenience that sustainable development may mean very different things to different people, to the point of emptying it of any coherent meaning and function".[71] This is perhaps why it is suggested that sustainable development has been "used and abused" more than any other concept in IEL.[72]

The extensive debate and discussion surrounding the precise content and meaning of sustainable development has resulted in various attempts to determine its components. Barral suggests the "intrinsically evolutive" nature of sustainable development makes its content very difficult to determine with certainty (or finality).[73] These core components or elements of sustainable development as proposed by various authors include: the integration of the environment and development (the principle of integration);[74] inter- and intra-generational equity;[75] sustainable use of natural resources;[76] CBDR;[77] sovereignty

[69] UNGA *Transforming Our World: The 2030 Agenda for Sustainable Development* (21 October 2015) A/RES/70/1 preamble. See Atapattu (2018) *JHRE* 82 where Atapattu notes the significance of the SDGs as "their adoption was the first time that the international community included all aspects of sustainable development in one document".

[70] V Barral "The Principle of Sustainable Development" in L Krämer & E Orlando (eds) *Principles of Environmental Law* (2018) 103 106.

[71] Barral "Sustainable Development" in *Principles of Environmental Law* 106. Barral argues further that the concept's malleability allows for its appropriation by a variety of movements.

[72] Dupuy & Viñuales *International Environmental Law* 91.

[73] Barral (2012) *EJIL* 382-383.

[74] A Boyle & D Freestone "Introduction" in A Boyle & D Freestone (eds) *International Law and Sustainable Development: Past Achievements and Future Challenges* (1999) 1 8-9; Barral (2012) *EJIL* 392 & 389; Atapattu (2018) *JHRE* 77; RE Kim "The Nexus between International Law and the Sustainable Development Goals" (2016) 25 *RECIEL* 15 20 & 25; Beyerlin & Marauhn *International Environmental Law* 16; R Wolfrum "Solidarity" in D Shelton (ed) *Oxford Handbook of International HR Law* (2013) 401 408; Sands et al *Principles of IEL* 219 & 229; P Birnie, A Boyle & C Redgwell *International Law and the Environment* 3 ed (2009) 116.

[75] Boyle & Freestone "Introduction" in *International Law and SD* 9; Marong (2003) *GIELR* 61; Barral (2012) *EJIL* 392 & 389; Atapattu (2018) *JHRE* 77; Beyerlin & Marauhn *International Environmental Law* 16; Wolfrum "Solidarity" in *Oxford Handbook of International HR Law* 408; Sands et al *Principles of IEL* 219 & 229; Birnie, Boyle & Redgwell *International Law and the Environment* 116.

[76] Boyle & Freestone "Introduction" in *International Law and SD* 8; Atapattu (2018) *JHRE* 77; Wolfrum "Solidarity" in *Oxford Handbook of International HR Law* 408; Beyerlin & Marauhn *International Environmental Law* 82; Sands et al *Principles of IEL* 219 & 229; Birnie, Boyle & Redgwell *International Law and the Environment* 116.

[77] Marong (2003) *GIELR* 61. This is often considered a component of intragenerational equity.

over natural resources;[78] and the right to development.[79] International organisations have also proposed lists of "principles of sustainable development" that should form part of the term.[80] Although there is no final consensus on the elements of the concept, it is widely accepted that, at a minimum, sustainable development entails integration of environmental considerations into social and economic development.[81] The principle of integration has been referred to as "the very backbone or cornerstone of the concept of sustainable development".[82] In addition to the principle of integration, there is little dispute that a core principle of sustainable development is equity in relation to present and future generations. Barral suggests that inter- and intra-generational equity are "axiomatic to understanding sustainable development".[83]

For the purposes of this study, reference is made to the following elements of sustainable development identified by Sands, Peel, Aguilar and Mackenzie: the principle of integration; the principle of sustainable use; the principle of intergenerational equity; and the principle intragenerational equity or equitable use.[84] This cluster of principles is consistent with the widespread acceptance of equity and integration as the core of sustainable development with equitable use being integrally linked to intragenerational equity, and sustainable use as similarly crucial for intergenerational equity. This concurs with Barral's understanding of the core components of sustainable development which she argues are intergenerational equity (the sustainability dimension); intragenerational equity (the developmental dimension); and integration (the blending of both dimensions).[85] The identified elements of sustainable development will be discussed separately below.

Despite a widespread recognition that sustainable development is recognised as an essential concept in international law, its precise nature and status is less certain. Academic opinion on the nature and status of sustainable development covers a range of potential

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[78] Marong (2003) *GIELR* 61.
[79] Atapattu (2018) *JHRE* 77; Boyle & Freestone "Introduction" in *International Law and SD* 11-12; Birnie, Boyle & Redgwell *International Law and the Environment* 116. See also UNGA *Declaration on the Right to Development* (4 December 1986, A/RES/41/128).
[80] See, for example, the New Delhi Declaration.
[81] Some authors argue that integration does not form part of sustainable development, but is rather a mechanism or technique to achieve sustainable development. Nevertheless, there is agreement that integration is fundamental to sustainable development whether as a core component or a means to achieve it. Marong (2003) *GIELR* 62-63; Barral (2012) *EJIL* 381.
[82] EB Bonanomi *Sustainable Development in International Law Making and Trade: International Food Governance and Trade in Agriculture* (2015) 130. See also Barral (2012) *EJIL* 381.
[83] Barral (2012) *EJIL* 380. See also T Field "Sustainable Development versus Environmentalism: Competing Paradigms for the South African EIA Regime" (2006) 123 *SALJ* 409 417. Field argues that "[e]quity, not environmental protection, is the absolute core of sustainable development".
[84] Sands et al *Principles of IEL* 219. See also Dupuy & Viñuales *International Environmental Law* 93. With reference to Sands, Dupuy and Viñuales refer to the same four elements of sustainable development.
[85] Barral "Sustainable Development" in *Principles of Environmental Law* 108.

positions. Possible views include sustainable development as: (1) a principle of international law (or an emerging one);[86] (2) an objective or goal of international law;[87] (3) a meta-principle or interstitial norm;[88] (4) a mechanism for conflict resolution;[89] and, most recently, (5) a right.[90]

Many authors suggest that sustainable development is an established principle of international law, or at least an emerging principle. Weeramantry J noted in his separate opinion in *Gabčikovo-Nagymaros* that "[t]he principle of sustainable development is […] part of modern international law by reason not only of its inescapable logical necessity, but also by reason of its wide and general acceptance by the global community".[91] Although the status of sustainable development in international law is far from settled, it is evident that, at a minimum, sustainable development is widely recognised as an indispensable objective or goal of international law. The status of the individual elements or principles of sustainable development will be addressed separately as they also operate independently and each have varying degrees of recognition and acceptance.

4 3 1 2 Integration

4 3 1 2 1 Meaning

As is evident from the discussion above, the principle of integration is fundamental to the concept of sustainable development. Many define sustainable development with reference to integration, arguing that it constitutes the core of sustainable development itself rather than an element thereof.[92] Others describe integration as the tool for attaining sustainable development.[93] While the other elements of sustainable development are often treated as

[86] Kim (2016) *RECIEL* 20; Bonanomi *Sustainable Development in International Law Making and Trade* 133; G Mayeda "Where Should Johannesburg Take Us? Ethical and Legal Approaches to Sustainable Development in the Context of International Environmental Law" (2004) 15 *CJIELP* 32.
[87] Beyerlin & Marauhn *International Environmental Law* 16; Barral (2012) *EJIL* 388-389; Kim (2016) *RECIEL* 20; Marong (2003) *GIELR* 61; Boyle & Freestone "Introduction" in *International Law and SD* 18; Birnie, Boyle & Redgwell *International Law and the Environment* 127.
[88] V Lowe "Sustainable Development and Unsustainable Arguments" in A Boyle & D Freestone (eds) *International Law and SD* (1999) 19 31. See also Barral (2012) *EJIL* 388-389.
[89] Barral (2012) *EJIL* 395.
[90] Moellendorf discusses sustainable development as a human right in the context of the UNFCCC which states in article 3 that "[t]he Parties have a right to, and should, promote sustainable development". See Moellendorf (2011) *The Monist* 433–52. As this is a right conferred on States Parties, it is not clear whether it can be referred to as a 'human' right. See 449 where Moellendorf describes the right as a "group right".
[91] *Gabčikovo-Nagymaros* (Separate Opinion of Vice–President Weeramantry) ICJ Reports (1997) 88 95.
[92] Marong (2003) *GIELR* 62-63; Barral (2012) *EJIL* 381; Bonanomi *Sustainable Development in International Law Making and Trade* 130.
[93] See, for example, Marong (2003) *GIELR* 62-63.

environmental principles in their own right, the principle of integration is rarely independent from sustainable development.[94]

The principle of integration is rooted in a recognition of the interdependence between the environment and social and economic development. The principle of integration recognises that the interrelationship of these interests means they should not be pursued independently. Montini describes integration as "the soft law obligation that States should endeavour to determine and promote their development patterns in an integrated and co-ordinated way with the necessity to establish an adequate legislation for the protection of the environment".[95] The principle of integration aims to ensure that the environment is considered in "the planning and implementation of development activities".[96] The Stockholm Declaration requires "rational management of resources" through "an integrated and co-ordinated approach to [States'] development planning".[97] Integration also requires the promotion of economic systems that "better address the problems of environmental degradation".[98] This integration requires states to consider carefully how they manage the environmental, social and economic dimensions of their respective jurisdictions. Integration necessitates cooperation between the officials from each of these areas tasked with planning, policy making, regulation, law-making and implementation.

It is inevitable that conflicts will arise in attempting to achieve the integration demanded by sustainable development. How these conflicts should be resolved is unclear, although the Stockholm Declaration refers to "rational planning" as an essential tool for conflict resolution,[99] and the New Delhi Declaration notes that such resolution may involve the use of new or existing institutions.[100] Both these examples envisage a balanced reconciliation of conflicting interests, and unfortunately do not address the circumstances of an irreconcilable clash between competing interests. In such a case it is not clear which aspect of sustainable development should be preferred. What is certain, however, is that integration requires, at the very least, that social and economic policy, planning and laws take environmental

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[94] M Montini "The Principle of Integration" in L Krämer & E Orlando (eds) *Principles of Environmental Law* (2018) 139 140. Montini discusses the principle of integration as distinct from sustainable development and argues that although it was an independent idea evident in principle 13 of the Stockholm Declaration, the principle only became integral to the concept of sustainable development through the later Brundtland Report and Rio Declaration.
[95] Montini "Integration" in *Principles of Environmental Law* 139.
[96] Brundtland Report, Annexe 1 principle 7.
[97] Stockholm Declaration principle 13.
[98] Rio Declaration principle 12.
[99] Stockholm Declaration principle 14.
[100] New Delhi Declaration principle 7, para 7.3.

considerations into account and endeavour not to cause unnecessary harm to the environment.

While it is widely recognised that integration is about the integration of environmental considerations into other areas, descriptions of these other areas have evolved alongside the concept of sustainable development. The initial conceptualisations of sustainable development centred on the integration of the environment and development (often specifically economic development).[101] A clear expression of integration is found in principle 4 of the Rio Declaration which states that "[i]n order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it".[102]

Following the 1992 Rio Conference, the understanding of the concept of sustainable development progressed from a mechanism to address an environment-development dichotomy to the idea of balancing social development, economic development and environmental protection.[103] The 2002 Johannesburg Declaration asserts that there is a "collective responsibility to advance and strengthen the interdependent and mutually reinforcing pillars of sustainable development - economic development, social development and environmental protection - at the local, national, regional and global levels".[104] Cordonier Segger and Khalfan suggest that this conscious separation of economic and social development is evidence of a growing awareness that "economic development is not synonymous with social development, and one does not automatically lead to the other".[105] It is interesting to note, however, that some authors still describe integration in terms of the environment and development, either grouping economic and social development together or sometimes ignoring social development altogether.[106] Nevertheless, the three pillars of sustainable development continue to receive support and have appeared in Agenda 2030 for Sustainable Development and the SDGs. The principle of integration forms the basis for

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[101] See Rio Declaration principle 4; *Gabčikovo-Nagymaros Project (Hungary/Slovakia)* Judgment, ICJ Reports (1997) 7 para 140; Beyerlin & Marauhn *International Environmental Law* 73; Stockholm Declaration principle 13. Sands et al also note that a link between conservation and development was made as early as 1949 at the UN Conference on the Conservation and Utilisation of Resources. See Sands et al *Principles of IEL* 227.

[102] Rio Declaration principle 4.

[103] Barral (2012) *EJIL* 379. Marong (2003) *GIELR* 28. S Atapattu "The Paris Agreement and Human Rights: Is Sustainable Development the 'New Human Right'?" (2018) 9 *JHRE* 68 75.

[104] Johannesburg Declaration on Sustainable Development (Johannesburg, September 2002) A/CONF199/20 para 5. See Atapattu (2018) *JHRE* 61. See also 86 where Atapattu notes that "[t]he social pillar of sustainable development […] has thus brought international human rights law within the sustainable development paradigm".

[105] Cordonier Segger & Khalfan *Sustainable Development Law* 29. Cordonier Segger and Khalfan credit the work of both Amartya Sen and Jeffery Sachs for this new perspective on economic and social development.

[106] See for example. Dupuy & Viñuales *International Environmental Law* 92; Montini "Integration" in *Principles of Environmental Law* 148. See also *Gabčikovo-Nagymaros* para 140.

the SDGs which cover a range of social, economic and environmental issues.[107] They promote integration by ensuring that social, economic and environmental goals are pursued concurrently in an integrated manner.

The principle of integration continues to evolve, and it has been suggested that a new dimension of the principle of integration is emerging – that of integration between sustainable development and climate change.[108] Alternative conceptualisations also propose that the integration of human rights is an additional component of integration and sustainable development.[109] There are those who describe sustainable development as the integration of three fields of international law as opposed to the integration of environmental considerations more broadly – these authors describe the principle of integration as the integration of IEL, international economic law, and international human rights law.[110] Regardless of the different areas to which integration is applied, it remains centred around the inclusion of environmental protection or environmental considerations in areas where it was previously overlooked or ignored. The most widely recognised conceptualisation of the principle of integration remains the integration of social, economic and environmental dimensions.

4 3 1 2 2 Status

The principle of integration has enjoyed wide recognition and adoption. In *Gabčikovo-Nagymaros* the ICJ affirms the need to "reconcile economic development with protection of the environment" expressed in "the concept of sustainable development".[111] In his separate opinion, Weeramantry J referred to the need to balance environmental and developmental considerations and held that sustainable development is "more than a mere concept" arguing that it is "a principle with normative value".[112] Weeramantry J describes sustainable development as "the principle of reconciliation" and "harmonization of developmental and environmental concepts",[113] and argues that the principle of sustainable development "is an integral part of modern international law".[114]

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[107] Agenda 2030 paras 2 & 5.
[108] Montini "Integration" in *Principles of Environmental Law* 147-148. Montini notes that Agenda 2030 and the Paris Agreement both "search for integration between sustainable development and climate change strategies and actions".
[109] New Delhi Declaration principle 7.
[110] See, for example, Leib *HR and the Environment* 115.
[111] *Gabčikovo-Nagymaros* para 140. In this case integration, expressed as the concept of sustainable development, meant that the parties were required to examine the effects of their activities on the environment.
[112] *Gabčikovo-Nagymaros* (Separate Opinion of Vice–President Weeramantry) 88.
[113] 90.
[114] 89.

The 2005 decision in the *Iron Rhine Railway Arbitration (Belgium/Netherlands) ("Iron Rhine")* similarly recognises principle 4 of the Rio Declaration and the integration of "environmental protection into the development process".[115] The Tribunal states that "[e]nvironmental law and the law on development stand not as alternatives but as mutually reinforcing, integral concepts".[116] The Tribunal held that the reactivation of the Iron Rhine railway line on Dutch territory "represents an economic development […] with which the prevention and minimalization of environmental harm is to be integrated" and the costs of environmental protection measures could not be severed from other costs associated with the reactivation of the route.[117] Sands, Peel, Aguilar and Mackenzie suggest that this decision confirms that the principle of integration "is a requirement of international law".[118]

Sands, Peel, Aguilar and Mackenzie also note that the principle of integrating environment and development is evident in a number of regional treaties.[119] This integrated approach is also found in international economic law and policy.[120] The preamble of the Agreement Establishing the World Trade Organisation ("WTO") recognises the "objective of sustainable development",[121] while the WTO Appellate Body has also described sustainable development with reference to the principle of integration.[122]

It is not possible to entirely separate the legal status of the principle of integration from the concept of sustainable development. Beyerlin and Marauhn explain sustainable development in terms of integration and argue that it is best described as "a holistic policy goal".[123] It is therefore concluded that although some may view integration as legal principle, it is most widely considered to be a policy goal or objective in international law.[124]

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[115] *Iron Rhine Railway Arbitration (Belgium v Netherlands)* 27 RIAA 35 (2005) para 59.
[116] Para 59.
[117] Para 243.
[118] Sands et al *Principles of IEL* 227.
[119] 228.
[120] 228.
[121] Agreement Establishing the World Trade Organization (adopted 15 April 1994, entered into force 1 January 1995) 1867 UNTS 154 ("Marrakesh Agreement") preamble.
[122] WTO *United States – Import Prohibition of Certain Shrimp and Certain Products Containing Shrimp* (12 October 1998) WT/DS58/AB/R ("*Shrimp/Turtle*") para 129 fn 107. See also Sands et al *Principles of IEL* 220.
[123] Beyerlin & Marauhn *International Environmental Law* 16.
[124] Marong (2003) *GIELR* 61; Kim (2016) *RECIEL* 20; Barral (2012) *EJIL* 388; Beyerlin & Marauhn *International Environmental Law* 16. See also 4 3 1 1 above in relation to the status of sustainable development.

4 3 1 3 Sustainable use

4 3 1 3 1 Meaning

In addition to its place as an element of sustainable development, the sustainable use of natural resources has been linked to the concepts of intergenerational equity,[125] conservation,[126] precaution,[127] and sovereignty over natural resources.[128] While there is no universal conceptualisation of sustainable use as a principle of IEL, in essence it relates to the conservation of natural resources for the sake of their long-term sustainability. Redgwell argues that the need for a principle of sustainable use of natural resources is "inextricably linked with human beings' increased capacity (technological, economic and social) to deplete or exhaust such resources".[129]

Early indications of an awareness of the dangers of over-exploitation of natural resources are evident in the 1893 *Bering Sea Fur Seals Arbitration (United States v United Kingdom)*.[130] The arbitration concerned a dispute over the exploitation of a common resource between the two states, in this case fur seals. The arbitration resulted in the adoption of regulations for the protection and preservation of fur seals,[131] although the underlying motivation was based on ideas of property and rights to hunt seals rather than modern conceptions of sustainability. In the decades that have followed, sustainable use has become a central concern in the management of marine living resources. Treaties concerned with the exploitation of marine living resources require levels of species' populations or stocks to be 'sustainable', 'optimal' or limited to the 'optimum sustainable yield', 'maximum sustainable yield', or 'maximum sustained levels'.[132]

The concept of sustainable use developed alongside the idea of conservation of the environment. Redgwell argues that the conservation of living resources in international law "includes both their protection and sustainable use, subject to the need to protect and

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[125] Beyerlin & Marauhn *International Environmental Law* 82; Convention on Biological Diversity (adopted 5 June 1992, entered into force 29 December 1993) 1760 UNTS 79 article 2.
[126] C Redgwell "Sustainable Use of Natural Resources" in L Krämer & E Orlando (eds*) Principles of Environmental Law* (2018) 115 119-120; Sands et al *Principles of IEL* 223; Kiss & Shelton *International Environmental Law* 219-220.
[127] Redgwell "Sustainable Use" in *Principles of Environmental Law* 121.
[128] 116-118.
[129] 119.
[130] *Bering Sea Fur Seals Arbitration (United States v United Kingdom)* 28 RIAA 263 (1893).
[131] See Dupuy & Viñuales *International Environmental Law* 4-5; Sands et al *Principles of IEL* 509-510.
[132] Sands et al *Principles of IEL* 222. See for example UN Fish Stocks Agreement (adopted 4 August 1995, entered in force 11 December 2001) 2167 UNTS 88; United Nations Convention on the Law of the Sea (adopted 10 December 1982, entered into force 16 November 1994) 1833 UNTS 3 ("UNCLOS") and Convention on Fishing and Conservation of the Living Resources of the High Seas (adopted 29 April 1958, entered into force 20 March 1966) 559 UNTS 285.

preserve endangered species, ecosystems and areas of natural beauty and cultural importance".[133] Sands, Peel, Aguilar and Mackenzie similarly note that sustainable use is evident in international legal instruments which refer to 'rational', 'wise', 'sound' or 'appropriate' conservation measures and programmes.[134] Whether the goal is described as conservation or as sustainable use, it is clear that there is an imperative to prevent unfettered exploitation of natural resources to ensure that these resources are preserved and not unduly depleted.

The principle of sustainable use appears in a number of international treaties.[135] A noteworthy example is the widely ratified Convention on Biological Diversity ("CBD") that was signed at the 1992 Rio Conference.[136] The objectives of the CBD are listed in article 1 of the Convention as "the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources". Article 2 then defines sustainable use as "the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations". Another interesting example of sustainable use in international treaty law is that of the 1994 Marrakesh Agreement establishing the WTO[137] which refers in its preamble to "the optimal use of the world's resources in accordance with the objective of sustainable development".[138] This underscores the relationship between the principle of sustainable use and the broader concept of sustainable development.

In addition to the presence of the principle in international treaties, sustainable use appears in a number of soft-law instruments. The 1972 Stockholm Declaration recognises that natural resources must be safeguarded "through careful planning and management"[139] and that the earth's capacity to produce renewable resources "must be maintained and, wherever practicable, restored or improved".[140] The Brundtland Report similarly affirms the need to preserve natural resources and to "observe the principle of optimum sustainable

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[133] Redgwell "Sustainable Use" in *Principles of Environmental Law* 119.
[134] Sands et al *Principles of IEL* 224.
[135] Beyerlin & Marauhn *International Environmental Law* 82; Sands et al *Principles of IEL* 223-224; Redgwell "Sustainable Use" in *Principles of Environmental Law* 116 & 120-121.
[136] Convention on Biological Diversity (adopted 5 June 1992, entered into force 29 December 1993) 1760 UNTS 79.
[137] Agreement Establishing the World Trade Organization (adopted 15 April 1994, entered into force 1 January 1995) 1867 UNTS 154.
[138] Marrakesh Agreement preamble.
[139] Stockholm Declaration principle 2.
[140] Stockholm Declaration principle 3.

yield" in relation to living natural resources and ecosystems.[141] Sustainable use was included in the 2030 Agenda for Sustainable Development, specifically SDG 14 and SDG 15.[142]

There is no universal or fixed meaning of sustainable use.[143] It is evident that different language is used in various instruments and the meaning attached to such language will be context-dependent.[144] It is also true that the specific measures required to give effect to sustainable use of the natural resource in question will depend on the shifting conservation status of the relevant species or the resource in question.[145] Permissible utilisation or consumption of natural resources is inherent in the concept, although the extent to which a particular use will be considered sustainable will depend on "the status of the resource and the demands upon it at any particular time".[146] What is common across these various iterations of sustainable use is the idea of sustainability over time and that of necessary limits to the exploitation of natural resources, often with reference to the principle of intergenerational equity.[147]

4 3 1 3 2 Status

As noted above, the principle of sustainable use of natural resources forms part of the concept of sustainable development. Beyerlin and Marauhn describe sustainable use as a "subordinate norm" or "special emanation" of sustainable development.[148] It has, however, developed independently of sustainable development and its status must therefore be considered separately.

Given the wide acceptance of sustainable use and its incorporation into a number of significant multilateral environmental treaties, it is possible to argue that the sustainable use

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[141] Brundtland Report Annexe 1 principle 3.
[142] SDG 14 is to "[c]onserve and sustainably use the oceans, seas and marine resources for sustainable development", while SDG 15 is to "[p]rotect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss".
[143] Sands et al note that the standards that limit exploitation of natural resources "cannot have an absolute meaning" as they will need to be determined in light of the particular circumstances of the dispute in question. See Sands et al *Principles of IEL* 225.
[144] Redgwell "Sustainable Use" in *Principles of Environmental Law* 121; Sands et al *Principles of IEL* 225. It is important to note that the 'context' referred to will include the nature of the relevant instruments, and binding treaties with explicit definitions of sustainable use will of course need to be understood very differently to soft law statements such as those in the Stockholm Declaration.
[145] Redgwell "Sustainable Use" in *Principles of Environmental Law* 121.
[146] Redgwell "Sustainable Use" in *Principles of Environmental Law* 121.
[147] Redgwell "Sustainable Use" in *Principles of Environmental Law* 121; Sands et al *Principles of IEL* 225. See 4 3 1 4 below for a discussion of intergenerational equity.
[148] Beyerlin & Marauhn *International Environmental Law* 82.

of natural resources "has gained the status of a universal customary rule".[149] Redgwell suggests that the crystallisation of sustainable use as an independent customary norm of international law can be attributed to substantial evidence of the principle in soft law, treaty commitments, supporting state practice and judicial decisions.[150] Although the contours of the principle are perhaps vague, it is clear that there is a customary rule or norm which states that natural resources should be conserved and utilised in a manner that does not result in their depletion over time.

4 3 1 4 Intergenerational equity

4 3 1 4 1 Meaning

As noted above, intergenerational equity is a vital component of sustainable development. It is the temporal dimension of sustainable development that requires the needs and interests of future generations to be considered in environmental and developmental planning and decision-making.[151] The principle is often described with reference to the responsibility of each generation to hold the environment in trust on behalf of future generations.[152] This forward-looking approach is particularly significant for environmental concerns as environmental damage "continues to produce effects over time, well beyond the time span of the current generation".[153]

A number of early environmental treaties refer to intergenerational equity and the interests of future generations. The earliest of these is the 1946 International Convention for the Regulation of Whaling which recognises in its preamble "the interest of the nations of the world in safeguarding for future generations the great natural resources represented by the whale stocks".[154] The 1968 African Convention on the Conservation of Nature and Natural Resources referred to "the present and future welfare of mankind",[155] while the 1972 World Heritage Convention also makes reference to future generations.[156]

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[149] Beyerlin & Marauhn *International Environmental Law* 82; Redgwell "Sustainable Use" in *Principles of Environmental Law* 116 & 122.
[150] Redgwell "Sustainable Use" in *Principles of Environmental Law* 116 & 122.
[151] Beyerlin & Marauhn *International Environmental Law* 79.
[152] I Michallet "Equity and the Interests of Future Generations" in L Krämer & E Orlando (eds*) Principles of Environmental Law* (2018) 150 154; E Brown Weiss "In Fairness to Future Generations" (1990) 32 *Environment* 7.
[153] Michallet "Equity" in *Principles of Environmental Law* 150.
[154] International Convention for the Regulation of Whaling (adopted 2 December 1946, entered into force 10 November 1948) 161 UNTS 72 preamble.
[155] African Convention on the Conservation of Nature and Natural Resources (adopted 15 September 1968, entered into force 16 June 1969, revised 11 July 2003) 1001 UNTS 3.
[156] World Heritage Convention (adopted 23 November 1972, entered into force 15 December 1975) 1037 UNTS 151 article 4.

Following these early treaties, intergenerational equity was increasingly recognised in international soft law declarations. The Stockholm Declaration notes that there is a responsibility "to protect and improve the environment for present and future generations". The Brundtland Report similarly recognises the principle of intergenerational equity, stating that "States shall conserve and use the environment and natural resources for the benefit of present and future generations".[157] The Rio Declaration affirms the need to "equitably meet developmental and environmental needs of present and future generations".[158] The 2030 Agenda for Sustainable Development also refers in its preamble to the protection of the planet "so that it can support the needs of the present and future generations".[159]

The principle was also included in later environmental treaties. The UN Framework Convention on Climate Change ("UNFCCC"), which was signed at the 1992 Rio Conference, not only refers to future generations in its preamble, but places intergenerational equity at the centre of the climate change regime by including it as one of the Convention's guiding principles.[160] In addition to the recognition of this principle in the UNFCCC, references to future generations have been included in numerous environmental treaties.[161] However, these references tend to be broad and often fall within non-binding portions of these agreements (often appearing in the preamble).[162]

Evidence of intergenerational equity can also be found in international jurisprudence. The ICJ made brief reference to intergenerational equity in its *Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons* where it held that "the environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, including generations unborn".[163] The Court also mentioned future generations in *Gabčikovo-Nagymaros* where it recognised "a growing awareness of the risks for mankind – for present and future generations – of pursuit of such interventions [in nature] at an unconsidered and unabated pace".[164] More recently in *Whaling in the Antarctic (Australia v*

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[157] Brundtland Report Annexe 1 principle 2.
[158] Rio Declaration principle 3.
[159] Agenda 2030 preamble.
[160] See United Nations Framework Convention on Climate Change (adopted 9 May 1992, entered into force 21 March 1994) 1771 UNTS 107 ("UNFCCC"). Article 3(1) states that "[t]he Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity".
[161] See Sands et al *Principles of IEL* 221.
[162] See, for example, CBD preamble; Convention on International Trade in Endangered Species of Wild Fauna and Flora (adopted 3 March 1973, entered into force 1 July 1975) 993 UNTS 243 ("CITES") preamble. See also Michallet "Equity" in *Principles of Environmental Law* 150.
[163] *Legality of the Threat or Use of Nuclear Weapons* Advisory Opinion, ICJ Reports (1996) 226 para 29. See also Dupuy & Viñuales *International Environmental Law* 89; Sands et al *Principles of IEL* 222.
[164] *Gabčikovo-Nagymaros* para 140.

Japan),[165] the ICJ noted the significance of a preambular reference to safeguarding resources for future generations in the International Convention for the Regulation of Whaling, linking it to sustainable exploitation of resources.[166]

Domestic jurisprudence suggests that the needs and interests of future generations can play an important role in affording standing to organisations or individuals in matters concerning the environment.[167] A significant domestic example of a case that considered the meaning of intergenerational equity in international law is that of *Urgenda Foundation v State of the Netherlands*.[168] In this case the court held that the principle of equity, in the context of UNFCCC article 3,

> "[M]eans that the [international climate] policy should not only start from what is most beneficial to the current generation at this moment, but also what this means for future generations, so that future generations are not exclusively and disproportionately burdened with the consequences of climate change".[169]

Perhaps the most notable scholarly work on intergenerational equity in international law is that of Edith Brown Weiss. She understands intergenerational equity as a "partnership among all generations" where each generation serves as trustee of the earth for future generations, and "a beneficiary of previous generations' stewardship".[170] With regard to the environmental burdens that current generations place on future generations, Brown Weiss identifies three categories: (1) depletion of resources; (2) degradation of environmental quality; and (3) discriminatory access to the environmental resources and benefits enjoyed by previous generations.[171] She proposes three corresponding principles of intergenerational equity to address these burdens.[172] Firstly, "the conservation of options" involves protecting the diversity of resources so as not to unduly restrict the options available to future generations.[173] Secondly, the "conservation of quality" refers to the maintenance of the earth's quality so as to leave it in no worse condition than it was received (i.e. providing

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[165] *Whaling in the Antarctic (Australia v Japan: New Zealand Intervening)* Judgment, ICJ Reports (2014) 226 ("*Whaling in the Antarctic*") para 56.
[166] For a more in-depth consideration of intergenerational equity see also *Whaling in the Antarctic* (Separate Opinion of Judge Cançado Trinidade) ICJ Reports (2014) 348 para 41-47.
[167] For example *Minors Oposa v Secretary of the Department of Environmental and Natural Resources* 33 ILM 173 (1994) Supreme Court of the Philippines in relation to timber licences and *Urgenda Foundation (on behalf of 886 individuals) v State of the Netherlands* C/09/456689/HA ZA 13-1396 (24 June 2015) Netherlands, Hague District Court ("*Urgenda v Netherlands*") in relation to climate change and greenhouse gas emissions. See also Dupuy & Viñuales *International Environmental Law* 89; Michallet "Equity" in *Principles of Environmental Law* 158; Sands et al *Principles of IEL* 222.
[168] *Urgenda Foundation (on behalf of 886 individuals) v State of the Netherlands* C/09/456689/HA ZA 13-1396 (24 June 2015) Netherlands, Hague District Court.
[169] *Urgenda v Netherlands* para 4.57.
[170] Brown Weiss (1990) *Environment* 8.
[171] Brown Weiss (1990) *Environment* 8.
[172] 9.
[173] 9.

a planet of equal quality to each generation).[174] And finally, "the conservation of access" refers to "equitable rights of access to the planetary legacy of past generations".[175] It is also important to note that for Brown Weiss the interests of future generations are also closely linked to the needs of the poor.[176] Intergenerational equity therefore cannot be achieved without a corresponding intragenerational equity.[177]

This influential work on intergenerational equity by Brown Weiss began before climate change became the urgent crisis it is today. The nature of long-term impacts associated with climate change and the content of article 3 of the UNFCCC plainly underscore the importance of intergenerational equity. Michallet points out that the "pending catastrophe of climate change has paved the way for the acknowledgement of the need for true equity for future generations".[178] The principle of intergenerational equity is more important than ever. Atapattu notes, however, that despite the progress made in the recognition of intergenerational equity, "the modalities of actually giving effect to the principle in the legal system have not been worked out".[179]

4 3 1 4 2 Status

There is broad recognition of the relevance of the principle of intergenerational equity in international law. It is referenced in numerous multilateral environmental treaties and international declarations.[180] However, outside of its inclusion in the UNFCCC, Michallet notes that the recognition of intergenerational equity "remains largely symbolic" and generally limited to "texts that are not legally binding or in the preambles to treaties".[181] Dupuy and Viñuales similarly note that "the foundation of the principle in positive law is still debated".[182] Due to this lack of legal recognition in international law, Michallet suggests that future generations exist "primarily in a world of legal potentialities".[183] While the interests of future generations are often referred to in international instruments, there is currently no conclusive evidence of an accepted legal principle of intergenerational equity in international law.

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[174] Brown Weiss (1990) *Environment* 9.
[175] 10.
[176] 9.
[177] Brown Weiss (1990) *Environment* 9. See also S Atapattu *Human Rights Approaches to Climate Change* (2016) 116-117. Intragenerational equity is discussed in more detail in 4 3 1 5 below.
[178] Michallet "Equity" in *Principles of Environmental Law* 159.
[179] Atapattu *HR Approaches to Climate Change* 118.
[180] See, for example, Sands et al *Principles of IEL* 221.
[181] Michallet "Equity" in *Principles of Environmental Law* 150.
[182] Dupuy & Viñuales *International Environmental Law* 89.
[183] Michallet "Equity" in *Principles of Environmental Law* 152.

4 3 1 5 Intragenerational equity

4 3 1 5 1 Meaning

Intragenerational equity is recognised as a fundamental component of sustainable development.[184] However, its precise contours are difficult to determine. Equity between present and future generations is regularly considered in tandem. Brown Weiss recognises the important link between the needs of present and future generations. She suggests that intragenerational equity is a dimension of intergenerational equity, arguing that the members of each generation have "an equal right to use and benefit from the planet".[185] Brown Weiss points out that the position of the poor must be considered, as "people living in extreme poverty cannot be expected to conserve resources for future generations when they cannot even care for the living".[186] She therefore argues that wealthier states must assist the poor with the protection of resources; access to economic benefits; and the prevention of environmental degradation.[187]

Equity among the present generation is often viewed in terms of North-South divisions.[188] States in the south have emphasised the urgency of present inequalities and poverty, arguing that these concerns must be addressed before intergenerational equity is tackled.[189] As Atapattu points out, "[i]n a world that has achieved unparalleled advancement in terms of wealth generation and technology, it is unthinkable that the vast majority of people live in appalling conditions and lack access to basic necessities of life".[190] It is the insistence of southern states that led to the inclusion of poverty eradication in a number international declarations related to the environment and sustainable development.[191] These North-South divisions have also brought about the concept of CBDR that has its roots in equity and fairness and recognises the varying capabilities of different states to combat poverty and environmental degradation.[192]

The concept of intragenerational equity can also be referred to as the principle of "equitable use", although this term aligns more closely with a circumscribed version of

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[184] See for example Atapattu *HR Approaches to Climate Change* 115; Scotford *Environmental Principles* 80.
[185] Brown Weiss (1990) *Environment* 9.
[186] 9.
[187] 9.
[188] Atapattu *HR Approaches to Climate Change* 111-112.
[189] 112.
[190] 112.
[191] See, for example, Rio Declaration principle 5; Johannesburg Declaration para 11; The Future We Want para 2. See also Atapattu *HR Approaches to Climate Change* 112-113; Sands et al *Principles of IEL* 225.
[192] See M Peeters "Environmental Principles in International Climate Change Law" in L Krämer & E Orlando (eds) *Principles of Environmental Law* (2018) 509 511; Atapattu *HR Approaches to Climate Change* 121. For a discussion of CBDR, see Chapter 4, 4 3 4 below.

intragenerational equity that is particularly concerned with the allocation of natural resources.[193] Equitable use could be seen as a component within the broader notion of intragenerational equity. In this sense, intragenerational equity is concerned with the equitable sharing of resources, for example shared fisheries stocks or freshwater resources.[194] Sands, Peel, Aguilar and Mackenzie note that this is particularly important in relation to the allocation of shared natural resources.[195] This is evidenced by the ICJ judgments in *Gabčikovo-Nagymaros* and *Pulp Mills on the River Uruguay (Argentina v Uruguay)*[196] both of which dealt with the use and control of a river as a shared natural resource. *Gabčikovo-Nagymaros* illustrates that unilateral control of a shared resource deprives the other state(s) of a reasonable and equitable share of the resource,[197] while *Pulp Mills* confirms that a failure to consider the environmental protection of the resource means that the use thereof is not equitable or reasonable.[198] The use of transboundary natural resources in "a reasonable and equitable manner" is a principle in the Brundtland Report,[199] while fair and equitable benefit-sharing in relation to genetic resources is also a central objective of the CBD.[200] The principle of equitable use aims to ensure that the use and allocation of natural resources is equitable and reasonable, although precisely what this means in practice would depend on the relevant international instrument and the resource in question.

The notion of intragenerational equity also intersects with the idea of environmental justice. Both equity and environmental justice are concerned with fairness in relation to the equal distribution of environmental resources as well as the burden of environmental harm. Kiss and Shelton recognise this link and suggest the following:

> "[S]tates and the international community must fairly allocate and regulate scarce resources to ensure that the benefits of environmental resources, the costs associated with protecting them, and any degradation that occurs (i.e., all the benefits and burdens) are equitably shared by all members of society".[201]

This problem of the distribution of environmental benefits and burdens is evident in the case of climate change. Those who are most impacted by the negative impacts of climate change are often vulnerable communities in developing states, while those who have contributed

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[193] See, for example, Sands et al *Principles of IEL* 225-226.
[194] Sands et al *Principles of IEL* 226.
[195] Sands et al *Principles of IEL* 226.
[196] *Pulp Mills on the River Uruguay (Argentina v Uruguay)* Judgment, ICJ Reports (2010) 14 ("*Pulp Mills*").
[197] See *Gabčikovo-Nagymaros* para 85.
[198] *Pulp Mills* para 177. See Sands et al *Principles of IEL* 226.
[199] Brundtland Report Annexe 1 principle 9.
[200] CBD article 1. See also Sands et al *Principles of IEL* 226.
[201] Kiss & Shelton *International Environmental Law* 15. Kiss and Shelton also argue that the fundamental protection of human rights is a component of intragenerational equity.

most have enjoyed the benefits associated with carbon-producing technologies.[202] Atapattu therefore argues that "the intragenerational aspect of climate change is quite clear".[203] As already noted above, article 3(1) of the UNFCCC recognises the importance of intragenerational equity and states that the climate system should be protected "for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities".

Although there is no universal conceptualisation of intragenerational equity, it is evident that the notion implicates the allocation of shared natural resources, the distribution of environmental benefits and burdens, as well as the eradication of poverty, and that it requires fairness and due consideration of the responsibilities and capabilities of different states. The precise nature of the concept may depend on the context within which it is applied.

4 3 1 5 2 Status

Little work has been done on the status of intragenerational equity. It is clear that it is broadly considered to be a component of sustainable development which, as noted above, is a widely recognised policy goal seen by some as a principle of international law. However, as a legal principle in its own right, intragenerational equity has received little recognition, despite its presence in international declarations and jurisprudence. Intragenerational equity as a principle of IEL therefore remains a soft-law concept with no independent legal force outside of its context-specific inclusion in binding instruments such as the CBD and UNFCCC.

4 3 2 Prevention

4 3 2 1 Introduction

Dupuy and Viñuales identify an overarching concept encompassing "principles expressing the idea of prevention".[204] They note that these principles related to prevention originate in "a body of international law concerning the friendly relations between neighbouring States".[205] Initially focused on the relationship between neighbouring States, these older principles developed to include emerging concerns related to transboundary harm as well as global environmental threats.[206] Although many treat these principles

[202] Atapattu *HR Approaches to Climate Change* 116.
[203] Atapattu *HR Approaches to Climate Change* 116.
[204] Dupuy & Viñuales *International Environmental Law* 62.
[205] 62.
[206] 62.

individually, this section follows the aforementioned conceptualisation to underscore the relationship between these principles.[207]

The emphasis on prevention in environmental law is rooted in an understanding that environmental harm is complex and frequently irreversible. Kiss and Shelton describe prevention as the "Golden Rule for the environment" explaining that from an environmental perspective remediation is often not possible and, from an economic perspective, where environmental rehabilitation is indeed possible, the costs thereof are can be prohibitive.[208] It is therefore economically and environmentally desirable to favour prevention when it comes to environmental harm. Duvic-Paoli echoes the centrality of prevention and describes it as "the cornerstone of environmental law".[209] The fundamental role of prevention is evidenced by its feature as an objective of almost all IEL mechanisms.[210]

Dupuy and Viñuales distinguish between prevention as an overarching concept or category of principles, and prevention as a distinct principle in its own right (the preventive principle).[211] Other principles under the umbrella of prevention include the no-harm principle (or the responsibility not to cause transboundary harm), the precautionary principle, and cooperation. Duvic-Paoli also describes prevention as incorporating three core norms, which she identifies as: (1) the principle of permanent sovereignty over natural resources; (2) the no-harm principle; and (3) the extension of prevention beyond national jurisdictions (which could be identified as the preventive principle).[212]

In addition to the substantive preventive principle, the discussion that follows will address the abovementioned principles of sovereignty over natural resources; no-harm and precaution. Given the well-recognised and intrinsic relationship between the principle of sovereignty and the no-harm principle, these will be discussed concurrently.[213]

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[207] See also L Duvic-Paoli "Principle of Prevention" in L Krämer & E Orlando (eds) *Principles of Environmental Law* (2018) 161-163.
[208] Kiss & Shelton *International Environmental Law* 204.
[209] L Duvic-Paoli "Principle of Prevention" in L Krämer & E Orlando (eds) *Principles of Environmental Law* (2018) 161 162.
[210] Kiss & Shelton *International Environmental Law* 204. Kiss and Shelton describe prevention as "an overarching aim that gives rise to a multitude of legal mechanisms".
[211] See Dupuy & Viñuales *International Environmental Law* 62-63 & 66-69.
[212] Duvic-Paoli "Prevention" in *Principles of Environmental Law* 162-163.
[213] See, for example, Sands et al *Principles of IEL* 201-202.

4 3 2 2 Sovereignty over natural resources and the no harm-principle

The principle of no-harm (or the prohibition of transboundary harm) can be traced back to the now classic *Trail Smelter Arbitration (United States v Canada)* where the arbitral tribunal held as follows:

> "[N]o state has the right to use or permit the use of territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence".[214]

As Gestri points out, no-harm was originally framed with reference to private law terms such as the principle of good neighbourliness.[215] This principle later appeared in the *Corfu Channel* case where the ICJ confirmed that it was a general and well-recognised principle that every state must not knowingly allow its territory to be used "for acts contrary to the rights of other states".[216]

The principle of state sovereignty over natural resources developed independently of the no-harm principle.[217] Gestri notes that the classical international law concept of sovereignty included the right to exploit, regulate or dispose of natural resources within the state's jurisdiction and this right was largely considered to be absolute.[218] Recognition of the principle (or right) can also be found in the 1962 UN General Assembly resolution which referred to "the right of peoples and nations to permanent sovereignty over their natural wealth and resources".[219] The resolution further qualifies the right, stating that it must be exercised in the interests of the "national development of the well-being of the people of the state concerned".[220] Sands, Peel, Aguilar and Mackenzie note that some international tribunals have accepted this right as part of customary international law.[221]

In 1972 the Stockholm Declaration explicitly recognised the principles of state sovereignty and no-harm, and made the important link between the two. Both principles form Principle 21 of the Stockholm Declaration which states that:

> "States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or

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[214] *Trail Smelter Arbitration (United States v Canada)* 3 RIAA 1905 (1941) ("*Trail Smelter*") 1965. See also Sands et al *Principles of IEL* 207; Dupuy & Viñuales *International Environmental Law* 63.
[215] M Gestri "Sovereignty of States over Their Natural Resources" in L Krämer & E Orlando (eds) *Principles of Environmental Law* (2018) 79 81.
[216] *Corfu Channel (United Kingdom v Albania)* Judgment (Merits), ICJ Reports (1949) 4 22. See Dupuy & Viñuales *International Environmental Law* 63-64.
[217] R Lefeber "Responsibility Not to Cause Transboundary Harm" in L Krämer & E Orlando (eds) *Principles of Environmental Law* (2018) 92 94.
[218] Gestri "Sovereignty of States" in *Principles of Environmental Law* 79-80.
[219] UNGA *Permanent Sovereignty over Natural Resources* (14 December 1962) Res 1803 (XVIII) para 1.
[220] UNGA *Permanent Sovereignty over Natural Resources* (14 December 1962) Res 1803 (XVIII) para 1.
[221] Sands et al *Principles of IEL* 202.

> control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction".[222]

Dupuy and Viñuales point out that the no-harm principle thus became considered as "a corollary of the principle of permanent sovereignty over natural resources".[223] The content of Principle 21 was repeated almost verbatim in Principle 2 of the 1992 Rio Declaration,[224] confirming continued support for this consolidated principle which some consider to be "the cornerstone of modern international environmental law".[225] Although the principles of no-harm and sovereignty are intrinsically linked, it is useful to consider the content and meaning of each concept independently.

4 3 2 2 1 Sovereignty over natural resources

As noted above, an absolute right to exploit natural resources without consideration for resultant environmental damage has been rejected in international law. This absolute version of sovereignty is sometimes referred to as the Harmon Doctrine, named after a conflict between the United States and Mexico regarding water pollution.[226] Kiss and Shelton note that this understanding of sovereignty has received "virtually unanimous" condemnation.[227] Gestri notes that sovereignty has become a qualified right that is restricted by various aspects of international law.[228] These limitations have been imposed by, *inter alia*, the prohibition of transboundary environmental harm;[229] the emergence of a general interest in the management of certain natural resources;[230] and the duty to ensure sustainable use of natural resources.[231] The strength of these limiting principles or factors is of course dependent on the authoritative status of the relevant aspect of IEL.

The recognition of state sovereignty in the Stockholm Declaration coincided with an increased recognition of the need for international cooperation for environmental protection.[232] The juxtaposition of state sovereignty and the prohibition of transboundary harm led to a new approach to sovereignty which allows for limitations to the use and

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[222] Stockholm Declaration principle 21.
[223] Dupuy & Viñuales *International Environmental Law* 64.
[224] The version in the Rio Declaration refers to states' "environmental and developmental policies". This minor change to the wording is consistent with the development of sustainable development and the principle of integration.
[225] Gestri "Sovereignty of States" in *Principles of Environmental Law* 82.
[226] In this 1895 case the then US Attorney General, Harmon, argued that the US was not responsible for water pollution in Mexico resulting from the use of the Rio Grande River within US territory. See Kiss & Shelton *International Environmental Law* 180; Beyerlin & Marauhn *International Environmental Law* 39.
[227] Kiss & Shelton *International Environmental Law* 180.
[228] Gestri "Sovereignty of States" in *Principles of Environmental Law* 80.
[229] 81.
[230] 83.
[231] 88.
[232] Sands et al *Principles of IEL* 202.

exploitation of natural resources in the interests of environmental protection. Nevertheless, state sovereignty over natural resources has remained central to IEL and is evident in various international environmental instruments.[233] Elements of state sovereignty can be found as early as 1933 when the Convention Relative to the Preservation of Fauna and Flora in the Natural State held that animal trophies were "the property of the Government of the territory concerned".[234] The principle of state sovereignty also appears in, for example, the 1971 Ramsar Convention[235] and the preamble the 1989 Basel Convention.[236] The preamble of the UNFCCC confirms "the principle of sovereignty of states in international cooperation to address climate change".[237]

It is important to note that shared natural resources require particular attention and regulation in relation to state sovereignty. Shared natural resources are those resources that exist over the territory of two or more states and therefore require a particular legal regime for their management. This includes transboundary watercourses, oil and gas deposits, and ecosystems as well as migratory species and regional air masses.[238] Gestri notes that this legal regime is based on a general duty of cooperation and the equitable use of shared resources.[239] In this sense each individual state cannot exercise an absolute and unfettered sovereignty over the resources in question.

In addition to the use and exploitation of natural resources, the right to sovereignty includes "the right to be free from external interference" in the exploitation of such resources.[240] This raises questions about the extraterritorial application of national environmental law in cases concerning shared natural resources. In other words, can a state protect its share of a common resource by imposing its nationally determined environmental standards on that resource within the territory of another state? An example of such a case is the *Shrimp/Turtle* dispute before the WTO Appellate Body where it was recognised that the United States could claim an interest in the conservation of endangered and migratory sea turtles in Asian waters.[241] The need for an extraterritorial application of national laws

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[233] Sands et al *Principles of IEL* 202-203.
[234] Convention relative to the Preservation of Fauna and Flora in their Natural State (adopted 8 November 1933, entered into force 14 January 1936) 172 LNTS 241 ("London Convention") article 9(6). See also Sands et al *Principles of IEL* 202.
[235] Convention on Wetlands of International Importance especially as Waterfowl Habitat (adopted 2 February 1971, entered into force 21 December 1975) 996 UNTS 245 ("Ramsar Convention") article 2(3).
[236] Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (adopted 22 March 1989, entered into force 5 May 1992) 1673 UNTS 126 ("Basel Convention") preamble.
[237] UNFCCC preamble.
[238] Gestri "Sovereignty of States" in *Principles of Environmental Law* 82-83.
[239] Gestri "Sovereignty of States" in *Principles of Environmental Law* 83.
[240] Sands et al *Principles of IEL* 203.
[241] See *Shrimp/Turtle* para 133. See Sands et al *Principles of IEL* 203-204.

arises where there are insufficient internationally accepted standards for environmental protection and conservation.[242] As Sands, Peel, Aguilar and Mackenzie note:

> "For 'shared resources' such as the high seas and atmosphere, it will often be difficult, if not impossible to draw a clear line between natural resources over which a state does and does not have sovereignty or exercise sovereign rights".[243]

The extraterritorial application of national environmental laws remains an unresolved question, and there is little clarity regarding the circumstances that would allow a state to adopt and apply unilateral environmental measures extraterritorially.[244] Beyerlin and Marauhn note that the equitable use of such shared resources should not dilute the obligation to prevent transboundary harm.[245] This obligation is discussed in more detail below.[246]

It is evident that the principle of state sovereignty over natural resources is qualified in a variety of ways unforeseen at the time of Harmon, although the circumstances and extent of such qualifications are often unclear. In any event, the right to sovereignty over natural resources remains relevant for IEL and should only be restricted to the extent deemed necessary to prevent environmental harm.

4 3 2 2 2 No-harm principle

As noted above, the principle that states should not use their territory in such a manner as to cause harm to another state (the no-harm principle) dates back to the decision in the *Trail Smelter* arbitration.[247] The most widely accepted formulation of the principle appears in Principle 21 of the Stockholm Declaration and is repeated in Principle 2 of the Rio Declaration,[248] both of which assert that states have "the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction".

Many authors have noted the significance of the phrase "or of other areas beyond the limits of national jurisdiction", arguing that this is indicative of an extension of the no-harm principle beyond the scope of transboundary concerns. Whereas an earlier conception of the principle focused on harm caused by neighbouring states, the Stockholm Declaration extended the scope of environmental protection to common areas (such as the high seas,

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[242] Sands et al *Principles of IEL* 204.
[243] 204.
[244] 206.
[245] Beyerlin & Marauhn *International Environmental Law* 41.
[246] See 4 3 2 2 2 below.
[247] See Kiss & Shelton *International Environmental Law* 185 on the significance of the *Trail Smelter* decision.
[248] See Rio Declaration principle 2.

the atmosphere, or Antarctica).[249] Despite the wording of the Stockholm and Rio Declarations, the no-harm principle continued to be treated as a limited question of transboundary harm.[250] In 1996, however, the ICJ confirmed the broader version of the principle in its advisory opinion on the *Legality of the Threat or Use of Nuclear Weapons* where it held that:

> "[T]he existence of the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control is now part of the corpus of international law relating to the environment".[251]

Dupuy and Viñuales suggest that the less restrictive form of the no-harm principle, extending beyond transboundary concerns, later developed into "a more comprehensive principle of prevention".[252] A distinct substantive principle of prevention is discussed below.[253]

Following its inclusion in the Stockholm Declaration, the no-harm principle was affirmed by a number of international organisations.[254] The UN General Assembly, for example, held that Principles 21 and 22 of the Declaration laid down "the basic rules" governing the "international responsibility of States in regard to the environment".[255] The principle also appears in various international treaties,[256] particularly in relation to the regulation of natural resources and pollution.[257] The UN Convention on the Law of the Sea ("UNCLOS") expresses the principle as a positive duty on states to:

> "[T]ake all measures necessary to ensure that activities under their jurisdiction or control are so conducted as not to cause damage by pollution to other states and their environment, and that pollution […] does not spread beyond the areas where they exercise sovereign rights".[258]

Following its inclusion as principle 2 of the Rio Declaration, the no-harm principle was incorporated into article 3 of the CBD as well as the preamble of the UNFCCC.

Although there is widespread recognition of the no-harm principle as a rule of customary international law,[259] the scope of its application is not always clear. It is useful to consider two central questions which relate to the threshold of harm and the nature of the

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[249] Beyerlin & Marauhn *International Environmental Law* 39.
[250] Dupuy & Viñuales *International Environmental Law* 65-66.
[251] *Legality of the Threat or Use of Nuclear Weapons* Advisory Opinion, ICJ Reports (1996) 226 para 29.
[252] Dupuy & Viñuales *International Environmental Law* 66.
[253] See 4 3 2 3 below.
[254] Sands et al *Principles of IEL* 208-209.
[255] UNGA *International Responsibility of States in regard to the Environment* (15 December 1972) Res 2996 (XXVII). Principle 22 of the Stockholm Declaration relates to the "international law regarding liability and compensation for the victims of pollution and other environmental damage".
[256] See Sands et al *Principles of IEL* 209; Lefeber "Transboundary Harm" in *Principles of Environmental Law* 93; Kiss & Shelton *International Environmental Law* 190.
[257] Lefeber "Transboundary Harm" in *Principles of Environmental Law* 93.
[258] UNCLOS article 194(2).
[259] See for example Sands et al *Principles of IEL* 206; Beyerlin & Marauhn *International Environmental Law* 44.

responsibility on states. Firstly, the threshold of damage to which the principle applies will be dependent on the circumstances of each case.[260] It is at least clear that the no-harm principle is not concerned with *de minimis* harm and it is widely accepted that the environmental damage should be considered "significant" for the principle to apply.[261] The second question regarding the content of the principle concerns the nature of the responsibility. A violation of the responsibility not to cause transboundary harm does not require injurious intent on the part of the state of origin, but rather a failure to exercise due diligence.[262] The principle of no-harm therefore imposes an obligation of due diligence on a state to take reasonable measures to "control and restrain likely harmful activities", where the harm is foreseeable.[263] Various factors will impact the particular degree of diligence required of a state, including the interests involved and the technical and economic ability of the state in question.[264] As Lefeber points out, it is interesting to note that the degree of diligence required has certainly increased since the Stockholm Declaration, and will likely require continuous revision according to the demands of the particular circumstances and state of the environment.[265]

Read with the right of states to exercise sovereignty over natural resources, the no-harm principle can be characterised as "a compromise between the territorial sovereignty of the state of origin of the environmental harm, on the one side, and the territorial integrity of the state likely to be affected by this harm, on the other".[266] Beyerlin and Marauhn suggest that this is a compromise which favours territorial integrity over sovereignty.[267] Whether or not this is the case, it is true that neither territorial integrity nor territorial sovereignty are absolute. As Lefeber explains:

> "[T]he carrying on of activities within a state's jurisdiction or control is not in all instances lawful (no absolute territorial sovereignty), and the causation of harm outside areas within a state's jurisdiction and control is not in all instances unlawful (no absolute territorial integrity)".[268]

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[260] Dupuy & Viñuales *International Environmental Law* 64.
[261] See Beyerlin & Marauhn *International Environmental Law* 41; Dupuy & Viñuales *International Environmental Law* 64. It could be argued that in cases where human rights are negatively impacted by transboundary environment harm, the harm should necessarily be considered significant.
[262] Dupuy & Viñuales *International Environmental Law* 64; Beyerlin & Marauhn *International Environmental Law* 42; Lefeber "Transboundary Harm" in *Principles of Environmental Law* 99.
[263] Beyerlin & Marauhn *International Environmental Law* 42; Lefeber "Transboundary Harm" in *Principles of Environmental Law* 99.
[264] Lefeber "Transboundary Harm" in *Principles of Environmental Law* 100.
[265] Lefeber "Transboundary Harm" in *Principles of Environmental Law* 100.
[266] Beyerlin & Marauhn *International Environmental Law* 40.
[267] Beyerlin & Marauhn *International Environmental Law* 40.
[268] Lefeber "Transboundary Harm" in *Principles of Environmental Law* 94.

4 3 2 2 3 Status of sovereignty over natural resources and the no-harm principle

The responsibility not to cause transboundary environmental harm has a wealth of support in international law[269] and has become part of customary international law.[270] It has been suggested that the no-harm principle is in fact a rule of customary international law,[271] although many refer to it as 'principle' of customary international law.[272] The principle is increasingly considered in terms of its formulation in Principle 21 of the Stockholm Declaration and Principle 2 of the Rio Declaration.[273] In other words, no-harm and sovereignty are considered two elements of a single principle which aims to prevent environmental harm without unnecessarily infringing on state sovereignty. Sands, Peel, Aguilar and Mackenzie suggest that this consolidated rule "may provide a legal basis for bringing claims under customary international law asserting liability for environmental damage".[274]

It is therefore clear that the legal principle of sovereignty over natural resources and the responsibility not to cause environmental harm forms part of customary international law. The principle was applied in the *Indus Waters Kishenganga Arbitration* where it was held that:

> "There is no doubt that states are required under contemporary customary international law to take environmental protection into consideration when planning and developing projects that may cause injury to a bordering State".[275]

As this example shows, the principle still finds application primarily in the context of transboundary harm and not "areas beyond the limits of national jurisdiction",[276] which has resulted in the development of a more comprehensive and substantive preventive principle to address broader environmental concerns.[277] This substantive preventive principle is discussed below.

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[269] Lefeber "Transboundary Harm" in *Principles of Environmental Law* 92; Sands et al *Principles of IEL* 208-210; Kiss & Shelton *International Environmental Law* 190.
[270] *Legality of the Threat or Use of Nuclear Weapons* Advisory Opinion, ICJ Reports (1996) 226; Dupuy & Viñuales *International Environmental Law* 65; Beyerlin & Marauhn *International Environmental Law* 44.
[271] Beyerlin & Marauhn *International Environmental Law* 41; Sands et al *Principles of IEL* 207.
[272] Lefeber "Transboundary Harm" in *Principles of Environmental Law* 94; Dupuy & Viñuales *International Environmental Law* 63. See section 4 2 above on the distinction between rules and principles.
[273] See for example Sands et al *Principles of IEL* 210.
[274] Sands et al *Principles of IEL* 211.
[275] *Indus Waters Kishenganga Arbitration (Pakistan v India)* Partial Award 31 RIAA 55 (2013) para 449.
[276] Stockholm Declaration principle 21; Rio Declaration principle 2. See for example Lefeber "Transboundary Harm" in *Principles of Environmental Law* 93 where it is suggested that the second part of principle 21 relates to "the responsibility not to cause transboundary harm" apparently ignoring the reference to areas outside of national jurisdiction.
[277] Dupuy & Viñuales *International Environmental Law* 65.

4 3 2 3 Preventive principle

4 3 2 3 1 Meaning

As noted above, the no-harm principle has evolved to include prevention of environmental harm beyond the transboundary context. The preventive principle (also known as the principle of prevention or preventive action) applies to the prevention of environmental damage irrespective of whether there are transboundary impacts.[278] There is naturally a great deal of overlap between the no-harm principle and the more comprehensive preventive principle. It is therefore necessary to point out that the boundaries between no-harm and the preventive principle are not always clear or consistently applied. Some authors prefer to simply extend the scope of no-harm;[279] while others refute the applicability of prevention to areas beyond national jurisdictions.[280] Then there are those that treat the preventive principle as independent, suggesting that the particular regime surrounding transboundary harm necessitates another distinct, more comprehensive principle applicable to the broader environment.[281] This section will treat the principle of prevention as an independent principle which may overlap with the features of the no-harm principle.

The principle of prevention emerged from the no-harm principle, and was initially a response to environmental damage in the form of pollution prevention.[282] However, the principle has evolved according to new understandings of the complexity of environmental degradation to include other types of harm as well as areas beyond the limits of national jurisdiction.[283] The preventive principle is essentially concerned with pro-active, anticipatory prevention to protect the environment in response to the often irreversible nature of environmental damage.[284] In *Gabčikovo-Nagymaros* the ICJ noted that it was:

> "[M]indful that, in the field of environmental protection, vigilance and prevention are required on account of the often irreversible character of damage to the environment and of the limitations inherent in the very mechanism of reparation of this type of damage".[285]

In *Pulp Mills* the ICJ also recognised the importance of "vigilance and prevention" in protecting ecological balance, noting that "the negative impact of human activities on the

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[278] Kiss & Shelton *International Environmental Law* 204.
[279] See, for example, Beyerlin & Marauhn *International Environmental Law* 39-46.
[280] See Duvic-Paoli "Prevention" in *Principles of Environmental Law* 170.
[281] Dupuy & Viñuales *International Environmental Law* 62; Kiss & Shelton *International Environmental Law* 204; Sands et al *Principles of IEL* 211.
[282] Kiss & Shelton *International Environmental Law* 204; Dupuy & Viñuales *International Environmental Law* 62 & 66; Duvic-Paoli "Prevention" in *Principles of Environmental Law* 166.
[283] Duvic-Paoli "Prevention" in *Principles of Environmental Law* 166.
[284] Dupuy & Viñuales *International Environmental Law* 66-67; Duvic-Paoli "Prevention" in *Principles of Environmental Law* 166.
[285] *Gabčikovo-Nagymaros* para 140. See also Duvic-Paoli "Prevention" in *Principles of Environmental Law* 161-162.

waters of the river may affect other components of the ecosystem of the watercourse such as its flora, fauna, and soil".[286]

The preventive principle requires the exercise of due diligence in ensuring that proactive measures are taken to prevent environmental damage.[287] It therefore requires "objective risk anticipation" as opposed to compensation for harm after the fact.[288] Duvic-Paoli argues that the principle of prevention (and associated duties) is triggered in circumstances where there is both a risk that environmental damage will materialise, as well as a sufficient magnitude or scope of harm.[289] In other words, a state will not be required to act according to the principle where there is a low probability of harm and the extent of the potential harm is negligible.[290]

The nature and extent of the due diligence obligation on states remains ill-defined. Duvic-Paoli indicates that states enjoy "considerable autonomy and flexibility" in this regard.[291] Despite this vague standard of care, the actions taken by a state would need to be reasonable, appropriate and proportional in light of the level of risk and harm in question.[292] States should also take into account relevant international minimum standards related to environmental management and protection as well as the latest applicable scientific understanding and technology.[293] In *Pulp Mills* the ICJ elaborated on the obligation of due diligence and described it as "an obligation which entails not only the adoption of appropriate rules and measures, but also a certain level of vigilance in their enforcement and the exercise of administrative control applicable to public and private operators, such as the monitoring of activities undertaken by such operators".[294]

Three duties can be identified in relation to the principle of prevention. The first (or overarching) duty is the duty to refrain from causing environmental harm and to take pro-active measures to prevent such harm.[295] The secondary (and procedural) duties flowing from this are the duty of cooperation and the duty to conduct environmental impact

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[286] *Pulp Mills* para 188.
[287] Kiss & Shelton *International Environmental Law* 205-206.
[288] Duvic-Paoli "Prevention" in *Principles of Environmental Law* 165.
[289] Duvic-Paoli "Prevention" in *Principles of Environmental Law* 165. Duvic-Paoli points out that it would be unrealistic to prohibit *de minimis* environmental harm "in a society where natural resources drive economic development".
[290] Duvic-Paoli "Prevention" in *Principles of Environmental Law* 165. There are of course various questions to be answered regarding, for example, the relevant threshold of harm and the duty on states where probability of harm is low but the scope of the possible harm is vast.
[291] Duvic-Paoli "Prevention" in *Principles of Environmental Law* 167.
[292] Duvic-Paoli "Prevention" in *Principles of Environmental Law* 168; Sands et al *Principles of IEL* 212.
[293] Duvic-Paoli "Prevention" in *Principles of Environmental Law* 167-168; Sands et al *Principles of IEL* 212.
[294] *Pulp Mills* para 101.
[295] Dupuy & Viñuales *International Environmental Law* 69. See also Duvic-Paoli "Prevention" in *Principles of Environmental Law* 168. Duvic-Paoli refers to this as the duty of care.

assessments ("EIAs").[296] The duty of cooperation includes duties of notification, exchange of information and consultation with other (potentially) affected states.[297] The duty to undertake EIAs is required in circumstances where a proposed activity is "likely to have a significant adverse impact" on the environment.[298]

As already noted, prevention is premised on the idea that it is better to prevent environmental harm before its occurrence than to provide for rehabilitation or compensation after the fact. This remains the ideal sequence of events.[299] The preventive principle does, however, have relevance for circumstances where harm has already occurred.[300] In the climate change regime, for example, the phrase "climate change mitigation" is preferred to prevention since climate change is already occurring.[301] The preventive principle remains relevant for the purposes of mitigating the scope of the harm despite the fact that it can no longer be entirely prevented.[302]

Despite the recognition in Principle 21 of the Stockholm Declaration of the applicability of prevention to areas beyond national jurisdiction, there is still uncertainty as to whether the principle of prevention can apply to instances of environmental harm regardless of where they occur. It is accepted that the principle applies to transboundary harm and to environmental harm in common areas such as the atmosphere and the high seas. What is not clear is whether it can be applied in a domestic context. This uncertainty relates to the principle of sovereignty. As discussed above, a state's sovereignty to use and exploit its natural resources can be restricted where the exercise of such sovereignty causes harm to the environment in other states (or to shared resources and common areas). Sands, Peel, Aguilar and Mackenzie argue that the extension of the duty to include environmental damage within a state's own jurisdiction is what distinguishes the broader principle of prevention from Principle 21 of the Stockholm Declaration.[303]

Duvic-Paoli outlines two possible approaches to the application of the preventive principle to environmental harm within a state's own territory.[304] The first is a human rights approach

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[296] Dupuy & Viñuales *International Environmental Law* 69; Duvic-Paoli "Prevention" in *Principles of Environmental Law* 168.
[297] Dupuy & Viñuales *International Environmental Law* 69; Duvic-Paoli "Prevention" in *Principles of Environmental Law* 168; Kiss & Shelton *International Environmental Law* 205.
[298] Dupuy & Viñuales *International Environmental Law* 69. See also Kiss & Shelton *International Environmental Law* 205.
[299] Sands et al *Principles of IEL* 212.
[300] Duvic-Paoli "Prevention" in *Principles of Environmental Law* 166-167.
[301] 167.
[302] 166-167.
[303] Sands et al *Principles of IEL* 212.
[304] Duvic-Paoli "Prevention" in *Principles of Environmental Law* 170.

consistent with the recognition in human rights courts that states have an obligation "to take preventive measures to ensure that industrial or technological activities, as well as natural disasters, do not adversely affect the enjoyment of specific human rights".[305] Such an approach does not apply to any environmental harm as it requires an impact on recognised human rights. The second approach is simply to establish inter-state preventive obligations that apply regardless of where the harm occurs. In the case of the UNCLOS, obligations related to the protection of the marine environment are not limited spatially and have been held to apply "regardless of where the harm is located".[306] These two approaches are increasingly used to apply the principle of prevention in a domestic context, but this domestic dimension is not yet recognised as part of the customary international law on prevention of environmental harm.[307]

4 3 2 3 2 Status

The preventive principle is set out in Principle 21 of the Stockholm Declaration and Principle 2 of the Rio Declaration. It explicitly extends the prevention of environmental harm beyond the jurisdiction of individual states. Although prevention was widely accepted in international law prior to 1996, this recognition was generally limited to transboundary harm.[308]

However, there is now widespread incorporation of prevention into numerous international environmental treaties.[309] The ICJ has also confirmed the expanded formulation of the preventive principle and held it to be part of general international law.[310] Similarly, in 2005 the arbitral tribunal in *Iron Rhine* noted the "growing emphasis" on

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[305] Duvic-Paoli "Prevention" in *Principles of Environmental Law* 170 with reference to, *inter alia*, *López Ostra v Spain* Application No 16798/90 (1994) ECtHR; *Budayeva v Russia* Application No 15339/02 (2008) ECtHR; *Länsman et al v Finland*, Communication No. 511/1992, CCPR/C/52/D/511/1992 (1994) HRC; *The Environment and Human Rights (State Obligations in Relation to the Environment in the Context of the Protection and Guarantee of the Rights to Life and to Personal Integrity – Interpretation and Scope of Articles 4(1) and 5(1) of the American Convention on Human Rights)* Advisory Opinion, Series A No 23 (15 November 2017) IACtHR.

[306] Duvic-Paoli "Prevention" in *Principles of Environmental Law* 170-171; Dupuy & Viñuales *International Environmental Law* 67. See also UNCLOS articles 192-194 and *South China Sea Arbitration before an Arbitral Tribunal constituted under Annex VII of UNCLOS (Philippines v China)* PCA Case No 2013-19 (2016) para 940.

[307] Duvic-Paoli "Prevention" in *Principles of Environmental Law* 169.

[308] Dupuy & Viñuales *International Environmental Law* 66-67.

[309] See Sands et al *Principles of IEL* 214-215 for a table setting out the treaty provisions incorporating prevention into more than fifty international environmental treaties covering a range of subject areas.

[310] *Legality of the Threat or Use of Nuclear Weapons* Advisory Opinion, ICJ Reports (1996) 226 para 29. See Dupuy & Viñuales *International Environmental Law* 68.

prevention in IEL[311] and recognised the "duty of prevention" as a legal principle of general international law.[312]

4 3 2 4 Precautionary principle

4 3 2 4 1 Meaning

The precautionary principle can be seen as an extension of the preventive principle. Dupuy and Viñuales suggest that precaution is an expression of prevention designed to "cover situations where there is scientific uncertainty regarding the impact of an activity on the environment".[313] The precautionary principle or precautionary approach has its origins in a traditional approach to environmental agreements which relied on scientific findings, methods or current knowledge as the basis for action or decisions related to the environment.[314] Measures to protect the environment would, for example, only be permitted where there was scientific evidence of significant damage.[315] However, in the 1980s awareness new environmental threats such as ozone depletion led to a more cautious approach in the face of scientific uncertainty.

The first treaty referring to precaution was the 1985 Convention for the Protection of the Ozone Layer[316] and later its 1987 Montreal Protocol.[317] Precaution appeared early on in the African context, in the 1991 Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa.[318] The Bamako Convention requires a "preventive, precautionary approach to pollution which entails, *inter alia*, preventing the release into the environment of substances which may cause harm to humans or the environment without waiting for scientific proof regarding such harm".[319]

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[311] *Iron Rhine* para 222.
[312] *Iron Rhine* para 59.
[313] Dupuy & Viñuales *International Environmental Law* 69.
[314] Sands et al *Principles of IEL* 230.
[315] See for example article 4(4) of the Convention for the Prevention of Marine Pollution from Land-Based Sources (adopted 4 June 1974, entered into force 6 May 1978) 1546 UNTS 119 ("Paris Convention") which allowed parties to take additional measures "if scientific evidence has established that a serious hazard may be created in the maritime area by that substance and if urgent action is necessary". See also Sands et al *Principles of IEL* 230 where it is noted that this required the party hoping to take measures "to 'prove' a case for action based upon the existence of sufficient scientific evidence".
[316] Convention for the Protection of the Ozone Layer (adopted 22 March 1985, entered into force 22 September 1988) 1513 UNTS 293.
[317] Montreal Protocol on Substances that Deplete the Ozone Layer (adopted 16 September 1987, entered into force 1 January 1989) 1522 UNTS 3 ("Montreal Protocol").
[318] Bamako Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes within Africa (adopted 30 January 1991, entered into force 22 April 1998) 2101 UNTS 177 ("Bamako Convention").
[319] Bamako Convention article 4(3)(f).

The formulation of the precautionary principle in the Rio Declaration has been extensively cited and forms the basis for the incorporation of the principle in a number of subsequent environmental agreements.[320] Principle 15 sets out the principle as follows:

> "In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation".

This principle is indirectly referenced in the preamble of the CBD[321] and the UNFCCC makes explicit reference to 'precautionary measures' in article 3, requiring such measures to be taken to prevent climate change (and mitigate adverse effects) even where there is a "lack of full scientific certainty".

Following the Rio Declaration, the precautionary principle was widely incorporated into a range of international environmental agreements. There are now over 50 environmental treaties containing the precautionary principle.[322] In fact, Kiss and Shelton suggest that since 1990 the precautionary principle "has appeared in almost all international instruments related to environmental protection".[323] The principle is also found in some non-environmental treaties, most notably the Treaty on the Functioning of the European Union ("TFEU") which states that EU policy on the environment "shall be based on the precautionary principle".[324]

Precaution also features in a range of regional and international jurisprudence.[325] It has appeared in the decisions of the International Tribunal for the Law of the Sea ("ITLOS");[326] the WTO;[327] the European Court of Justice ("ECJ");[328] as well as the decisions of regional

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[320] Sands et al *Principles of IEL* 230; Beyerlin & Marauhn *International Environmental Law* 54; JB Wiener "Precautionary Principle" in L Krämer & E Orlando (eds) *Principles of Environmental Law* (2018) 174 175.
[321] A precautionary approach is further developed in the Cartagena Protocol on Biosafety to the Convention on Biological Diversity (adopted 29 January 2000, entered into force 11 September 2003) 2226 UNTS 208 ("Cartagena Protocol"). See Dupuy & Viñuales *International Environmental Law* 71.
[322] Dupuy & Viñuales *International Environmental Law* 71; Beyerlin & Marauhn *International Environmental Law* 49; Wiener "Precautionary Principle" in *Principles of Environmental Law* 175; Sands et al *Principles of IEL* 230.
[323] Kiss & Shelton *International Environmental Law* 207.
[324] Consolidated Version of the Treaty on the Functioning of the European Union (13 December 2007) OJ C 115/47 ("TFEU") article 191(2). See also Dupuy & Viñuales *International Environmental Law* 71.
[325] See Dupuy & Viñuales *International Environmental Law* 72-73; Beyerlin & Marauhn *International Environmental Law* 51-52; Sands et al *Principles of IEL* 234-239; Kiss & Shelton *International Environmental Law* 208-212.
[326] *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* Advisory Opinion, ITLOS Rep 10 (2011) para 135.
[327] WTO *EC Measures Concerning Meat and Meat Products (Hormones)* (16 January 1998) WT/DS48/AB/R ("*Beef Hormones*") para 124.
[328] *Gowan Comercio v Ministero della Salute* Judgment, C-77/09 (22 December 2010) ECJ paras 76-79. See also L Krämer "Environmental Principles and the EU Court of Justice" in L Krämer & E Orlando (eds) *Principles of Environmental Law* (2018) 587 590-592.

human rights bodies.[329] Although the precautionary principle consistently appears in various decisions, there is no uniform understanding of its meaning and scope of application. Beyerlin and Marauhn note that "international courts have showed reluctance to apply [precautionary action] as a legal yardstick for solving interstate disputes, because of the still ambiguous contents and normativity of this concept".[330]

It is clear that despite its widespread recognition, there is no single definition of the precautionary principle or approach.[331] Wiener submits that there are "several different Precautionary Principles" across the variety of treaties and jurisprudence.[332] These versions of the precautionary principle tend to contain a combination of certain elements which include scientific uncertainty; the reversal of the burden of proof; the license to act; and provisionality.[333] These elements are discussed in more detail below.

Beyerlin and Marauhn explain that scientific uncertainty is a prerequisite for the precautionary principle, distinguishing it from the more general preventive principle.[334] In other words, precaution does not relate to just any prevention of environmental harm, but is specifically applicable in cases where there is uncertainty regarding the environmental damage or the causal link between a certain activity and environmental harm.[335] In such cases the lack of scientific certainty should not be used as a justification for inaction.[336] In this sense the precautionary principle can be seen as a license to act by taking preventative measures in spite of uncertainty.[337] In some contexts the principle has been extended beyond this permissive position to include a duty to act where there is a threat of serious environmental damage.[338] Although it is not settled that precaution entails this duty to act, it is clear that it at least prohibits inaction on the sole basis of scientific uncertainty.

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[329] See *Community of San Mateo de Huanchor v Peru* Report No 69/04, Petition 504/03 (15 October 2004) IACHR para 12; *Balmer-Schafroth v Switzerland* Application No 22110/93 (1997) ECtHR, *Tătar v Romania* Application No 67021/01 (2009) ECtHR para 120. See also OW Pedersen "Environmental Principles and the European Court of Human Rights" in L Krämer & E Orlando (eds) *Principles of Environmental Law* (2018) 578 581-584.

[330] Beyerlin & Marauhn *International Environmental Law* 52.

[331] Sands et al *Principles of IEL* 234; Dupuy & Viñuales *International Environmental Law* 70; Wiener "Precautionary Principle" in *Principles of Environmental Law* 175.

[332] Wiener "Precautionary Principle" in *Principles of Environmental Law* 175.

[333] See Wiener "Precautionary Principle" in *Principles of Environmental Law* 179.

[334] Beyerlin & Marauhn *International Environmental Law* 53.

[335] There is some disagreement on whether the distinction between the preventive principle and the precautionary principle is appropriate. See Wiener "Precautionary Principle" in *Principles of Environmental Law* 178; Beyerlin & Marauhn *International Environmental Law* 53.

[336] Dupuy & Viñuales *International Environmental Law* 70; Beyerlin & Marauhn *International Environmental Law* 55; Atapattu *HR Approaches to Climate Change* 123.

[337] Beyerlin & Marauhn *International Environmental Law* 54.

[338] 55.

Some formulations of the precautionary principle also include a reversal of the burden of proof. In such cases the proponent of an activity which is potentially harmful to the environment bears the onus of proving that the activity will not be harmful.[339] This is a departure from the standard approach which would require anyone challenging a potentially harmful activity to prove the alleged environmental harm. In *Pulp Mills* the ICJ rejected the assertion that the precautionary approach requires shifting the burden of proof.[340] Sands, Peel, Aguilar and Mackenzie argue, however, that state practice supports this interpretation of precaution as including a reversal of the burden of proof.[341]

The precautionary principle has also been described as a risk management tool requiring that precautionary action be taken only once an appropriate risk assessment has been completed.[342] Wiener notes that, as a risk management tool, the precautionary principle does not clarify how various risks should be prioritised, or indeed how the risks of the precautionary measures themselves should be weighed against the risk of the potentially harmful activity.[343] It is important to note that the precautionary approach cannot mean that all risks must be eliminated.[344] There will always be a degree of risk, and inherent in risk is a degree of uncertainty.[345] For this reason, many formulations of precaution include qualifications requiring a threat of "serious or irreversible" damage to the environment.[346]

Wiener also describes the element of provisionality as integral to the precautionary principle.[347] The element of provisionality emphasises the dynamic nature of activities and their impacts on the environment and requires precautionary measures to be provisional in the sense that they are continuously revised and updated according to new developments and knowledge.[348] In other words, while scientific uncertainty can indicate the need for provisional precautionary measures, these measures must be updated when the uncertainty inevitably decreases with new scientific knowledge and developments.[349]

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[339] 55. This aspect of the precautionary approach could be seen as the basis for certain mandatory environmental impact assessments.
[340] Dupuy & Viñuales *International Environmental Law* 72.
[341] Sands et al *Principles of IEL* 233.
[342] Kiss & Shelton *International Environmental Law* 208.
[343] Wiener "Precautionary Principle" in *Principles of Environmental Law* 178.
[344] Kiss & Shelton *International Environmental Law* 212.
[345] Wiener "Precautionary Principle" in *Principles of Environmental Law* 178.
[346] For example, Rio Declaration principle 15.
[347] Wiener "Precautionary Principle" in *Principles of Environmental Law* 182-183.
[348] Wiener notes that the precautionary approach is predicated on uncertainty, which necessarily implies opportunities to learn and thereby reduce uncertainty. See Wiener "Precautionary Principle" in *Principles of Environmental Law* 182.
[349] The Montreal Protocol, for example, "evolves over time in light of new scientific, technical and economic developments". See UNEP "The Montreal Protocol" *UN Environment* (undated) <https://www.unenvironment.org/ozonaction/who-we-are/about-montreal-protocol> (accessed 02-02-2021);

As shown above, the international treaties and jurisprudence on the precautionary principle evidence a range of formulations of the concept. However, as Beyerlin and Marauhn indicate, the collection of multilateral environmental agreements incorporating the principle concur that: (1) precaution applies in circumstances of scientific uncertainty; and (2) this uncertainty does not justify inaction in the face of potential environmental harm.[350] Sands, Peel, Aguilar and Mackenzie argue that, at the very least, the precautionary principle requires greater protection of the environment in cases where an activity's impact on the environment is scientifically uncertain.[351]

The formulation of the precautionary approach in the Rio Declaration incorporates these common elements and remains the most widely recognised understanding of the principle.[352] Due to its extensive use and acceptance, Dupuy and Viñuales refer to Principle 15 as "precaution's canonical formulation".[353] It has also been described as reflecting "a widely accepted minimum understanding" of the precautionary principle.[354]

4 3 2 4 2 Status

There is no consensus on whether or not the precautionary principle is a legal principle of customary international law, although there are indications that it could be considered an emerging principle of customary international law.[355] Beyerlin and Marauhn note that the reluctance of international bodies to rely on the principle raises doubts as to whether it is a "universally accepted rule of customary international law".[356] The WTO Appellate Body has held that its status "still awaits authoritative formulation",[357] while the ITLOS has noted the incorporation of the principle "into a growing number of international treaties and other instruments",[358] and a clear "trend towards making this [precautionary] approach part of customary international law".[359] Sands, Peel, Aguilar and Mackenzie suggest that this has already happened, arguing that there is sufficient evidence of support for the principle "to

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Montreal Protocol on Substances that Deplete the Ozone Layer (adopted 16 September 1987, entered into force 1 January 1989) 1522 UNTS 3,

[350] Beyerlin & Marauhn *International Environmental Law* 50.

[351] Sands et al *Principles of IEL* 240.

[352] Sands et al *Principles of IEL* 230 & 239; Wiener "Precautionary Principle" in *Principles of Environmental Law* 175; Beyerlin & Marauhn *International Environmental Law* 54; Dupuy & Viñuales *International Environmental Law* 73.

[353] Dupuy & Viñuales *International Environmental Law* 72.

[354] Beyerlin & Marauhn *International Environmental Law* 54.

[355] Sands et al *Principles of IEL* 564; Beyerlin & Marauhn *International Environmental Law* 56.

[356] Beyerlin & Marauhn *International Environmental Law* 55.

[357] *Beef Hormones* para 123.

[358] *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* Advisory Opinion, ITLOS Rep 10 (2011) para 135.

[359] *Responsibilities and Obligations of States in the Area* para 135.

allow a strong argument to be made that it reflects a principle of customary law".[360] Whether or not it currently constitutes customary international law, at the very least the precautionary principle is an emerging principle of customary international law of "eminent importance".[361]

4 3 3 Polluter pays

4 3 3 1 Meaning

Pollution and environmental harm can be incredibly costly for the environment and for society. The polluter pays principle essentially aims to ensure that the person responsible for environmental harm bears the costs of such harm, including the costs of any rehabilitation or remediation required to make sure that the environment is in an "acceptable state".[362]

Much of the early development of the polluter pays principle occurred within the particular context of the OECD in the 1970s.[363] The OECD identified polluter pays as a guiding principle in 1972 explaining that "the cost of [pollution prevention and control measures] should be reflected in the cost of goods and services which cause pollution in production and/or consumption".[364] This can be described as an internalisation of costs as the costs of relevant measures are borne by the producers and/or consumers of the product rather than broader society. This idea of internalisation of environmental costs was later carried over into the Rio Declaration.

Prior to the Rio Declaration, one of the only references to the polluter pays principle in an international instrument was in the 1990 International Convention on Oil Pollution Preparedness, Response and Cooperation which explicitly takes account in its preamble of "the 'polluter pays' principle as a general principle of international environmental law".[365] In 1992 the Rio Declaration affirmed the broadened applicability of the polluter pays principle beyond the OECD. Principle 16 of the Rio Declaration states that:

> "National authorities should endeavour to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should,

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[360] Sands et al *Principles of IEL* 238.
[361] Beyerlin & Marauhn *International Environmental Law* 56.
[362] Beyerlin & Marauhn *International Environmental Law* 58.
[363] P Schwartz "The Polluter-Pays Principle" in L Krämer & E Orlando (eds) *Principles of Environmental Law* (2018) 260 260. Sands et al note that elements of polluter pays are also evident in instruments relating to civil liability for damage from hazardous activities in the 1960s. See Sands et al *Principles of IEL* 241.
[364] OECD *Recommendation of the Council on Guiding Principles concerning International Economic Aspects of Environmental Policies* (26 May 1972) OECD/LEGAL/0102.
[365] International Convention on Oil Pollution Preparedness, Response and Cooperation (adopted 30 November 1990, entered into force 13 May 1995) 1891 UNTS 51.

> in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment".[366]

What Beyerlin and Marauhn refer to as the "softened" language of Principle 16 – that authorities should "endeavour to promote" – is evidence of a compromised formulation of polluter pays necessitated by objections to the principle from certain countries.[367] The formulation in the Rio Declaration was confirmed in the preamble of the Stockholm Convention on Persistent Organic Pollutants.[368] The polluter pays principle has since been incorporated into various other international environmental treaties and continues to play a particularly prominent role in the OECD and European contexts.[369] It does not, however, enjoy the same level of recognition afforded to the principles of prevention and precaution.[370]

As noted above, the polluter pays principle aims to internalise environmental costs by ensuring that these costs are borne by the producer and/or consumer and not by the greater public either in the form of degraded natural resources or through expenditure of public funds for measures taken by the state to address the harm.[371] The principle is intended to promote rational and responsible use of environmental resources[372] and can have a steering effect on private actors through "a significant negative economic incentive" to avoid future environmental harm.[373] The internalisation of costs should, however, only apply to certain circumstances. Dupuy and Viñuales note that the preconditions for polluter pays are: (1) that the activity in question is socially desirable; and (2) that the resulting environment damage is tolerable or not considered to be significant.[374] In circumstances where the activity has no social utility and desirability, or the damage is significant or severe, the principle of prevention dictates that the activity should not proceed.[375] In other words, the polluter pays principle does not imply that *any* cost can be internalised and it does not constitute a "right to pollute".[376]

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[366] Rio Declaration principle 16.
[367] Beyerlin & Marauhn *International Environmental Law* 59; Sands et al *Principles of IEL* 240.
[368] Stockholm Convention on Persistent Organic Pollutants (adopted 22 May 2001, entered into force 17 May 2004) 2256 UNTS 119.
[369] See Beyerlin & Marauhn *International Environmental Law* 58-59; Kiss & Shelton *International Environmental Law* 213; Dupuy & Viñuales *International Environmental Law* 83; Schwartz "Polluter-Pays" in *Principles of Environmental Law* 264.
[370] Sands et al *Principles of IEL* 240.
[371] Dupuy & Viñuales *International Environmental Law* 81-82.
[372] Kiss & Shelton *International Environmental Law* 212.
[373] Beyerlin & Marauhn *International Environmental Law* 58.
[374] Dupuy & Viñuales *International Environmental Law* 82.
[375] Dupuy & Viñuales *International Environmental Law* 82.
[376] Schwartz "Polluter-Pays" in *Principles of Environmental Law* 270; Dupuy & Viñuales *International Environmental Law* 82.

The precise contours of the polluter pays principle are undefined and its meaning and practical application are open to interpretation.[377] The concept of "polluter" has many possible interpretations and there are questions regarding the allocation of costs where several entities contribute to the chain of pollution.[378] There is also little consistency in state practice regarding the methods used to implement the principle.[379] This lack of clear content may contribute to lack of universal recognition of the polluter pays principle, when compared to the more widely accepted principles of prevention and precaution.[380]

It is important to note that the polluter pays principle has largely been applied within specific geographic regions and has limited application internationally among states. Principle 16 of the Rio Declaration places an obligation on "national authorities", and implementation of polluter pays largely takes place domestically.[381] This is perhaps due to the principle's lack of definition, rendering it most effective within the context of an established system of legal rules. One notable exception to the domestic application is the regional application of the principle in the EU context.[382]

4 3 3 2 Status

The polluter pays principle has been incorporated into various binding and non-binding international instruments, but it has not yet become part of customary international law.[383] In 2004 the arbitral tribunal in the *Rhine Chlorides Arbitration* noted that:

> "[T]his principle features in several international instruments, bilateral as well as multilateral, and […] it operates at various levels of effectiveness. Without denying its importance in treaty law, the Tribunal does not view this principle as being a part of general international law".[384]

The tribunal also concluded that the polluter pays principle was of no relevance to the interpretation of relevant international instruments.[385] It is, however, an accepted principle in OECD and EU contexts.[386]

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[377] Sands et al *Principles of IEL* 240; Dupuy & Viñuales *International Environmental Law* 82-83; Beyerlin & Marauhn *International Environmental Law* 59.
[378] Beyerlin & Marauhn *International Environmental Law* 59; Kiss & Shelton *International Environmental Law* 214; Dupuy & Viñuales *International Environmental Law* 83.
[379] Beyerlin & Marauhn *International Environmental Law* 59.
[380] Sands et al *Principles of IEL* 240. See 4 3 3 2 below on the status of the polluter pays principle.
[381] Beyerlin & Marauhn *International Environmental Law* 58; Sands et al *Principles of IEL* 241.
[382] See Beyerlin & Marauhn *International Environmental Law* 58; Kiss & Shelton *International Environmental Law* 215.
[383] Beyerlin & Marauhn *International Environmental Law* 59; Sands et al *Principles of IEL* 240.
[384] *Case Concerning the Auditing of Accounts Between the Kingdom of the Netherlands and the French Republic pursuant to the Additional Protocol of 25 September 1991 to the Convention on the Protection of the Rhine Against Pollution by Chlorides of 3 December 1976 (Netherlands v France)* 25 RIAA 267 (2005) ("*Rhine Chlorides Arbitration*") Unofficial English translation <https://pcacases.com/web/sendAttach/78> (accessed 17-04-2019) para 103.
[385] *Rhine Chlorides Arbitration* para 103.
[386] See, for example, Sands et al *Principles of IEL* 241-243.

Beyerlin and Marauhn note that the polluter pays principle has the normative quality of a legally binding rule, but that the "softened" wording of Principle 16 is evidence of a lack of state support.[387] Schwartz similarly recognises that the polluter pays principle has the potential "to become a legitimate global legal principle".[388] There is therefore the possibility that the principle will evolve and gain recognition. Sands, Peel, Aguilar and Mackenzie note that polluter pays has received increased attention partly as a result of "the greater consideration given to the relationship between environmental protection and economic development",[389] as this requires an awareness of economic factors such as the environmental costs of pollution. The polluter pays principle may therefore enjoy increased support in future, but it currently does not have customary international law status.

4 3 4 Common but differentiated responsibilities

4 3 4 1 Meaning

The principle of CBDR is rooted in considerations of equity and fairness.[390] Atapattu suggests that CBDR is an expression of the underlying basis for polluter pays – the idea that those responsible for causing environmental harm should bear responsibility for fixing it.[391] Beyerlin and Marauhn similarly suggest that polluter pays is the domestic application of the idea, while CBDR applies it to the realm of interstate relations.[392] CBDR ultimately aims to balance the needs and interests of developed and developing states. Through recognising common responsibilities for global environmental problems, developed countries are able to ensure the participation of developing countries in addressing such problems, also allowing for development which is limited by virtue of environmental considerations.[393] Equally, through recognising differentiated responsibilities for environmental harm, developing countries receive recognition for their developmental needs and their reduced capacities to address environmental problems.[394]

One of the earliest references to CBDR in treaty law can be found in the Convention for the Protection of the Ozone Layer of 1985 which recognised the need to take account of

[387] Beyerlin & Marauhn *International Environmental Law* 59.
[388] Schwartz "Polluter-Pays" in *Principles of Environmental Law* 270.
[389] Sands et al *Principles of IEL* 243.
[390] Atapattu *HR Approaches to Climate Change* 120; Sands et al *Principles of IEL* 244; Beyerlin & Marauhn *International Environmental Law* 63.
[391] Atapattu *HR Approaches to Climate Change* 105.
[392] Beyerlin & Marauhn *International Environmental Law* 64.
[393] Dupuy & Viñuales *International Environmental Law* 83-84; Sands et al *Principles of IEL* 245.
[394] Dupuy & Viñuales *International Environmental Law* 83.

states' means and capabilities.[395] The 1987 Montreal Protocol to the Convention allowed developing countries to delay compliance with certain measures.[396] CBDR later became more common in multilateral environmental agreements following its inclusion as a principle in the Rio Declaration in 1992.

Leading up to the Rio conference developing countries, in the form of the G-77 group, proposed a version of the principle of CBDR which explicitly recognised the consumption and production patterns of developed countries as being significant contributors to the deteriorating environment.[397] This proposal was controversial and the final text of Principle 7 of the Rio Declaration has been described as a "watered-down" version of this proposal:[398]

> "States shall co-operate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem. In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command".[399]

This description of CBDR has become the most common, and it reflects the two central elements of the principle. The first is the common dimension which recognises the common responsibility of states to protect the environment.[400] The second element is the differential dimension which acknowledges the differing circumstances of states in relation to both the contribution of each state to environmental problems (responsibility) as well as each states' level of development and its resultant ability to act in the interests of environmental protection (capability).[401]

The application of CBDR allows for broader participation of states in environmental matters of common concern.[402] In relation to the obligations and environmental standards applied, CBDR results in either different substantive obligations for developing states or, alternatively, the same obligations for all states with a delayed grace period within which developing states should comply.[403] The application of CBDR often also includes an

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[395] Convention for the Protection of the Ozone Layer (adopted 22 March 1985, entered into force 22 September 1988) 1513 UNTS 293 article 2(2). See Dupuy & Viñuales *International Environmental Law* 84.
[396] Montreal Protocol article 5(1). See also Sands et al *Principles of IEL* 247.
[397] Atapattu *HR Approaches to Climate Change* 118; Beyerlin & Marauhn *International Environmental Law* 65.
[398] Atapattu *HR Approaches to Climate Change* 118.
[399] It is interesting to note that despite this more diluted version of the principle, the United States was unhappy with the wording and still appended a qualifying interpretive statement to Principle 7. See Atapattu *HR Approaches to Climate Change* 118-119; Beyerlin & Marauhn *International Environmental Law* 65.
[400] Dupuy & Viñuales *International Environmental Law* 84; Sands et al *Principles of IEL* 244.
[401] Dupuy & Viñuales *International Environmental Law* 83-84; Sands et al *Principles of IEL* 244.
[402] Sands et al *Principles of IEL* 245, Dupuy & Viñuales *International Environmental Law* 83-84.
[403] Sands et al *Principles of IEL* 247; Beyerlin & Marauhn *International Environmental Law* 66. See, for example, Montreal Protocol article 5(1).

obligation on developed states to provide financial and technological assistance to developing states in order to enable them to meet their obligations under a specific treaty.[404]

When it comes to the presence of CBDR in multilateral environmental treaties, it is undoubtedly clearest in the climate change regime. Rajamani describes CBDR as "a fundamental part of the conceptual apparatus of the climate change regime" and an "overarching principle guiding future development of the regime".[405] CBDR is found in operational provisions of the UNFCCC and in the preamble to the Kyoto Protocol. The principle also features prominently in the later Paris Agreement.[406] CBDR also features in the CBD which not only requires financial and technical assistance to be provided to developing states, but also makes the extent of implementation contingent on receipt of such assistance.[407] The CBD also asserts that the extent to which developing states implement their commitments under the Convention "will take fully into account the fact that economic and social development and eradication of poverty are the first and overriding priorities of the developing country Parties".[408] Although the precise form of CBDR is specific to the treaty in question, Rajamani notes that the principle is "the bedrock of burden-sharing arrangements crafted in the new generation of multilateral environmental treaties".[409]

The principle of CBDR serves two important functions. Firstly, it can guide the interpretation of current provisions of environmental agreements, such as the UNFCCC. Secondly, the principle has a "structuring" function in that it influences the content of future environmental agreements.[410] As noted below, the legal status of the principle is unclear. However, Dupuy and Viñuales point out that performance of these functions is not dependent on the status of the principle in international law.[411]

4 3 4 2 Status

CBDR is a prominent feature of a number of widely ratified treaties.[412] The principle's presence in these treaties is, however, not enough to give CBDR customary status in

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[404] Sands et al *Principles of IEL* 247; Beyerlin & Marauhn *International Environmental Law* 64. See, for example, Montreal Protocol article 10.
[405] L Rajamani "Common but Differentiated Responsibilities" in L Krämer & E Orlando (eds) *Principles of Environmental Law* (2018) 291 298. Rajamani is specifically referencing the principle of common but differentiated responsibilities and respective capabilities as it appears in UNFCCC article 3.
[406] Article 2 of the Paris Agreement expressly refers to "the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances".
[407] CBD article 20.
[408] CBD article 20(4).
[409] Rajamani "CBDR" in *Principles of Environmental Law* 298.
[410] See Dupuy & Viñuales *International Environmental Law* 85-86; Rajamani "CBDR" in *Principles of Environmental Law* 298.
[411] Dupuy & Viñuales *International Environmental Law* 85-86.
[412] Rajamani "CBDR" in *Principles of Environmental Law* 298.

international law. Outside the context of specific treaties, the status of CBDR "remains controversial".[413] Rajamani suggests that the differences in content across various contexts indicates that the principle may not have the necessary norm-creating character to be deemed a legal principle of customary international law.[414] Beyerlin and Marauhn disagree and argue that CBDR "possesses a normative quality which makes it eligible for gaining the status of a principle of customary international law".[415] Whether or not the CBDR is capable of becoming a legal principle of customary international law, it is clear that there is insufficient evidence to conclude that it currently enjoys such status.

4 4 Conclusion

The principles of IEL address multiple dimensions of legal problems related to environmental protection, environmental threats and environmental justice. Although the principles examined above have different levels of acceptance and legal status, all are recognised as playing an important role in contemporary IEL. Reliance on these principles of IEL in the interpretation of States Parties' obligations under the Covenant also facilitates the harmonisation of IEL and human rights law. As abstract principles that can find application in various scenarios, these principles are potentially useful for understanding how human rights and the environment could interact in international law. As a result of their legal nature as principles, the principles of IEL are inherently flexible and therefore able to be applied to context-specific problems in a range of circumstances. This makes them particularly useful in guiding the interpretation of the Covenant and allows for the integration of principles that can apply to the diverse circumstances of States Parties.

For the purpose of this study, these environmental principles serve to illustrate how environmental challenges can be addressed and how the Covenant can be interpreted so as to incorporate these ideas which may otherwise be overlooked. While these principles may offer guidance on how to approach environmental challenges, they should not direct the interpretation of the Covenant outside of what the rules of interpretation permit.[416] In light of this role, it is important to note that any lack of definitive legal status identified in relation to the principles in this chapter is not a bar to their usefulness. The principles remain useful as indicators of how environmental problems have been approached in international law and how they could possibly be addressed where they pose a threat to ESCRs.

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[413] Dupuy & Viñuales *International Environmental Law* 85.
[414] Rajamani "CBDR" in *Principles of Environmental Law* 298.
[415] Beyerlin & Marauhn *International Environmental Law* 70.
[416] See Chapter 3, 3 3 on the rules and principles of interpretation applicable to the Covenant.

The chapters that follow explore the extent to which the principles of IEL examined in this chapter should contribute to an interpretation of the Covenant that incorporates environmental considerations.[417] As noted, this interpretation must be consistent with the applicable rules of human rights treaty interpretation. It is proposed that this interpretive exercise may lead to more appropriate and effective mechanisms to address environmental threats to the continued realisation of ESCRs. The chapters below thus consider the contribution of the principles of IEL to greening the interpretation of key elements of article 2(1), beginning with the concept of “maximum available resources”.

[417] The principles are applied in Chapters 5 and 6, while Chapter 7, 7 3 provides a summary of the contribution that each of these principles make to greening article 2(1) in this dissertation.

CHAPTER 5:
MAXIMUM AVAILABLE RESOURCES

5 1 Introduction

Resources are an inevitable and essential part of fulfilling the rights in the Covenant. Article 2(1) requires that States Parties to the Covenant use "the maximum of available resources" towards the progressive realisation of ESCRs.[1] The goal of this chapter is greening the concept of maximum available resources through an interpretation based on the methodology explored in Chapter 3, and guided by the principles of IEL examined in Chapter 4.

The principle of sovereignty over natural resources and the right of self-determination in article 1 of the Covenant establish the freedom of states to use and dispose of their resources. This chapter therefore begins with an investigation of these concepts with particular emphasis on their relationship to natural resources, as well as the constraints imposed on the freedom to use and dispose of resources.

The chapter then investigates the interpretation of maximum available resources. Breaking the concept into its central elements, this chapter examines the meaning of "resources", "availability" and "maximum".[2] The notions of equitable and effective use are also investigated.[3] Each of these elements of maximum available resources is examined in turn with an analysis of its current interpretation. Following this, the relevance of environmental considerations is considered in relation to each of these elements. This analysis is primarily based on the environmental principles identified in Chapter 4 as these principles provide an indication of how environmental challenges can be approached and managed. The principles of IEL are considered in relation to each element of maximum available resources in order to explore what alternative or supplementary interpretations of the concept might be appropriate given the interrelationship between ESCRs and the environment.

In light of the significant role of natural resources within the functioning of the environment, as well as the extent of potential impacts on ESCRs resulting from natural resource exploitation, this category of resources requires particular attention. The definition

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[1] International Covenant on Economic, Social and Cultural Rights (adopted 16 December 1966, entered into force 3 January 1976) 993 UNTS 3 article 2(1).
[2] See sections 5 2, 5 3 and 5 4 below.
[3] See "The Limburg Principles on the Implementation of the International Covenant on Economic, Social and Cultural Rights" (1987) 9 *HR Quarterly* 122-135 para 27.

of natural resources as well as their relationship with the Covenant and treatment by the Committee are therefore examined separately as a type of resource under "maximum available resources".[4] Given the particular impacts, risks and challenges of natural resource exploitation, these are investigated in the context of the "availability" of resources.[5]

5 2 Sovereignty, self-determination and the use of resources

5 2 1 The relevance of sovereignty and self-determination to "maximum available resources"

Before turning to the meaning and application of specific elements of the concept of "maximum available resources" under the Covenant,[6] it is helpful to discuss the significance of state sovereignty and the right of self-determination in the context of resource use.[7] Both self-determination and state sovereignty are integral to the question of how a state mobilises and uses resources, and is therefore an important point of departure in considering the concept of "maximum available resources" under article 2(1) of the Covenant.

The right of self-determination in article 1 of the Covenant has a degree of overlap with the international law principle of state sovereignty, particularly in relation to natural resources. Both sovereignty and self-determination relate to the freedom to determine how natural wealth and resources are utilised and disposed of by States Parties or by peoples.[8] The concept of state sovereignty has particular relevance in the context of the obligation to use the "maximum of available resources" for the realisation of ESCRs. Francioni notes that "an attribute of sovereignty is the right of every State to adopt its preferred type of socio-economic regime", thereby choosing how resource use and economic activity will be regulated and managed.[9] This aspect of sovereignty is echoed in the right to self-determination in article 1 which allows all peoples to "freely determine their political status and freely pursue their economic, social and cultural development".[10] This freedom implies freedom from interference by, for example, other states, international organisations, or

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[4] See 5 3 2 below.
[5] See 5 4 2 below.
[6] See sections 5 3 to 5 6 below.
[7] The terms "sovereignty" or "state sovereignty" are used here to denote the principle of sovereignty over natural resources which is discussed at Chapter 4, 4 3 2 2 1.
[8] See A Rosas "The Right to Self-determination" in A Eide, C Krause & A Rosas (eds) *Economic, Social and Cultural Rights: A Textbook* 2 ed (2001) 111 116. Rosas describes the aspect of self-determination related to natural resource use as a version of the principle of sovereignty, noting that an earlier draft of the Covenant included direct reference to permanent sovereignty over natural resources.
[9] F Francioni "Natural Resources and Human Rights" in E Morgera & K Kulovesi (eds) *Research Handbook on International Law and Natural Resources* (2016) 66 70.
[10] ICESCR article 1(1).

foreign investors.[11] In the context of the Optional Protocol to the ICESCR, the Committee has confirmed that it will "respect the margin of appreciation of the State party to determine the optimum use of its resources and to adopt national policies and prioritize certain resource demands over others".[12] General Comment 3 similarly notes that "the Covenant is neutral" with respect to political and economic systems".[13]

However, in order for States Parties to be held accountable for their obligations under the Covenant, certain restrictions must be placed on this freedom of States Parties to regulate the use of resources. A State Party's freedom to decide how it mobilises and uses available resources is constrained by its obligations to respect, protect and fulfil ESCRs. Uprimny, Hernández and Araújo describe some of these "specific obligations" which serve to circumscribe state sovereignty:

> "[I]n several concluding observations, the CESCR has recognized that States must take steps to use their limited resources on major priorities, to increase allocation of resources to particular non-attended economic and social rights, to play a major role in maximizing the resources available to address ESCR needs when they are largely devoted to other purposes (i.e., debt servicing), and 'to ensure that limited resources, public as well as private, are used in the most effective manner to promote the realization of rights'".[14]

State sovereignty and self-determination can be seen as the point of departure for inquiries into States Parties' resource use and allocation. Although a state is entitled to choose its own economic regime and political system, States Parties to the ICESCR have agreed to certain constraints on this freedom according to their obligations in relation to the fulfilment of ESCRs. Precisely how a State Party's resource use can be circumscribed or redirected for the purposes of the Covenant is largely determined by the Committee's interpretation and application of the obligation to use the "maximum of available resources" for the realisation of Covenant rights.

The meaning and content of the principle of sovereignty over natural resources has been discussed in detail in chapter 4.[15] The following section therefore focuses on the content of

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[11] See 5 4 2 2 and 5 4 2 3 below for a discussion of the relationship between States Parties, private actors and the exploitation of natural resources.

[12] CESCR *An Evaluation of the Obligation to Take Steps to the "Maximum of Available Resources" under an Optional Protocol to the Covenant"* (10 May 2007) E/C12/2007/1 para 12. See also para 11.

[13] CESCR *General Comment No 3: The Nature of States Parties' Obligations (Art 2, Para 1, of the Covenant)* (14 December 1990) E/1991/23 para 8.

[14] R Uprimny, SC Hernández & AC Araújo "Bridging the Gap: The Evolving Doctrine on ESCR and 'Maximum Available Resources'" in K Young (ed) *The Future of Economic and Social Rights* (2019) 624 632-633 with reference to UN Economic and Social Council *Report of the UNHCHR, Agenda Item 14(g) of the Provisional Agenda, Geneva* (25 June 2007) E/2007/82 para 35.

[15] See Chapter 4, 4 3 2 2.

the right of self-determination and its implications for resource use, with a particular emphasis on natural resources.

5 2 2 The right of self-determination

The right of self-determination is set out in article 1 of the Covenant and also appears in article 1 of the ICCPR. The provision is therefore often referred to as 'common article 1'. Article 1(1) states that "[a]ll peoples have the right of self-determination" which entitles them to "freely determine their political status and freely pursue their economic, social and cultural development".[16] Article 1(2) expressly refers to natural resources, noting that all peoples may "freely dispose of their natural wealth and resources" and that "[i]n no case may a people be deprived of its own means of subsistence".[17] Article 25 echoes this assertion of freedom to dispose of natural resources, stating that "[n]othing in the present Covenant shall be interpreted as impairing the inherent right of all peoples to enjoy and utilize fully and freely their natural wealth and resources".[18] The right of self-determination is particularly important for indigenous peoples and the use of their territories and resources.[19] The participation of the people of a State Party in resource use and allocation is also an important element of self-determination.[20]

The essence of self-determination has been described as "recognizing the inherent equality and dignity of all peoples to maintain their distinct socio-cultural-political organization, free from unwanted, external interference".[21] This freedom from interference extends to the use and disposal of natural resources. Rosas points out that the freedom to dispose of natural wealth and resources in the final version of article 1(2) is "a watered-down version" of an earlier draft which referenced the principle of permanent sovereignty over natural resources.[22] Francioni explains that the right of self-determination is "at the top of the catalogue of human rights" and that it is "inextricably connected with the international

[16] ICESCR article 1(1). The text of article 1 is repeated in article 1 of the International Covenant on Civil and Political Rights (adopted 16 December 1966, entered into force 23 March 1976) 999 UNTS 171 and therefore often referred to as 'common article 1'.
[17] ICESCR article 1(2). See also article 25.
[18] ICESCR article 25.
[19] See, for example, F Mackay "The Rights of Indigenous Peoples in International Law" in L Zarsky (ed) *Human Rights and the Environment: Conflicts and Norms in a Globalizing World* (2001) 9 9-54; AF Vrodljak "Self-Determination and Cultural Rights" in F Francioni & M Scheinin (eds) *Cultural Human Rights* (2008) 41 41-78; E Desmet *Indigenous Rights Entwined with Nature Conservation* (2011) 204-208.
[20] See O De Schutter "Public Budget Analysis for the Realization of Economic, Social and Cultural Rights: Conceptual Framework and Practical Implementation" in K Young (ed) *The Future of Economic and Social Rights* (2019) 527 540 & 622-623.
[21] Mackay "Rights of Indigenous Peoples" in *HR and the Environment: Conflicts and Norms in a Globalizing World* 11.
[22] A Rosas "The Right to Self-determination" in A Eide, C Krause & A Rosas (eds) *Economic, Social and Cultural Rights: A Textbook* 2 ed (2001) 111 116.

regime of natural resources" in relation to the principle of sovereignty over natural resources in article 1(2).[23] This "foundational collective human right"[24] forms part of customary international law[25] and has also been described as a norm of *jus cogens*[26] with *erga omnes* character.[27] De Schutter has referred to self-determination as "one of the most under-rated and under-utilized norms in the international human rights system of protection".[28] The right is also recalled and reiterated in the UN Declaration on the Right to Development which states that the right to development implies "the full realization" of the right of self-determination.[29]

In the context of decolonisation, where self-determination has its "most enduring impact",[30] this right has been understood as the right of newly independent states to reclaim their sovereignty from imperial powers.[31] Genest and Paquerot describe self-determination as "a normative foundation for decolonization".[32] Self-determination involves the political freedom of independent states through self-governance and the ability to manage and exploit their natural resources for economic independence and freedom from foreign interference.[33] The text of common article 1 does not, however, restrict its application to colonisation but applies to "all peoples".[34] Self-determination has been recognised as "a

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[23] Francioni "Natural Resources and HR" in *International Law & Natural Resources* 69-70. See also LH Leib *Human Rights and the Environment* (2011) 141.
[24] A Maguire & J McGee "A Universal Human Right to Shape Responses to a Global Problem? The Role of Self-Determination in Guiding the International Legal Response to Climate Change" (2017) 26 *RECIEL* 54 60.
[25] M Wewerinke-Singh *State Responsibility, Climate Change and Human Rights under International Law* (2018) 99.
[26] Wewerinke-Singh *State Responsibility, Climate Change & HR* 99.
[27] *East Timor (Portugal v Australia)* Judgment (Jurisdiction), ICJ Reports (1995) 90 para 29. See C Moore "Waterworld: Climate Change, Statehood and the Right to Self-Determination" in O Quirico & M Boumghar (eds) *Climate Change and Human Rights: An International and Comparative Law Perspective* (2017) 104 107. See also article 1(3) of the ICESCR which requires States Parties to the Covenant to promote and respect the right of self-determination.
[28] UNHRC Working Group on the Right to Development *The International Dimensions of the Right to Development: A Fresh Start towards Improving Accountability, Olivier de Schutter* (22 January 2018) A/HRC/WG2/19/CRP1 para 115.
[29] UNGA *Declaration on the Right to Development* (4 December 1986) A/RES/41/128 preamble & article 1(2).
[30] AF Vrodljak "Self-Determination and Cultural Rights" in F Francioni & M Scheinin (eds) *Cultural Human Rights* (2008) 41 52.
[31] See *Western Sahara* Advisory Opinion, ICJ Reports (1975) 12 para 54-70. See also O De Schutter *International Human Rights Law: Cases, Materials, Commentary* 3 ed (2019) 767; Wewerinke-Singh *State Responsibility, Climate Change & HR* 100; Rosas "Self-determination" in *ESCR: A Textbook* 112; Maguire & McGee (2017) *RECIEL* 60. Some have argued that the right does not have application outside of a colonial context, however, as Vrdoljak notes, with its inclusion in the Human Rights Covenants of 1966 the right "moved away from the narrow colonial context" and became of universal application to all peoples. See Vrodljak "Self-Determination & Cultural Rights" in *Cultural HR* 53 & 63. See also S Atapattu *Human Rights Approaches to Climate Change* (2016) 84; Rosas "Self-determination" in *ESCR: A Textbook* 114; Mackay "Rights of Indigenous Peoples" in *HR and the Environment: Conflicts and Norms in a Globalizing World* 22.
[32] G Genest & S Paquerot "Environmental Human Rights as a Battlefield: A Grammar of Political Confrontation" (2016) 7 *JHRE* 132 151.
[33] Francioni "Natural Resources and HR" in *International Law & Natural Resources* 70.
[34] Wewerinke-Singh *State Responsibility, Climate Change & HR* 100.

process, and not a right extinguished upon independence".[35] The right therefore has application beyond decolonisation and has played an important role in the context of indigenous peoples' rights, although it is not limited to such groups.[36]

Some authors distinguish between an internal and external dimension of the right of self-determination.[37] The external dimension relates to the right to be free from interference or intervention, or the right to resist domination and occupation, with the support of the international community.[38] The internal dimension relates to a population's right to "a government representative of all the groups within the population".[39] This internal dimension underscores the role of self-determination as "a norm about participatory democracy"[40] that "establishes the democratic principle [of] transferring the sovereignty from the State to the people".[41] The right of peoples to determine their political status free from domination or exploitation, whether internally or externally, has also been described as the "political dimension" of self-determination.[42]

Of particular relevance for "maximum available resources", and natural resources in particular, is the "resource dimension" of the right of self-determination.[43] This aspect of the right relates to the freedom to "pursue socio-economic and cultural development free from national or external interference".[44] This would include freedom to determine socio-economic policies and freedom from, for example, the exploitation of natural resources by foreign investors, particularly where such exploitation does not benefit the local population

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[35] Vrodljak "Self-Determination & Cultural Rights" in *Cultural HR* 78.
[36] UNHRC Working Group on the Right to Development *The International Dimensions of the Right to Development* (2018) A/HRC/WG2/19/CRP1 para 118; Maguire & McGee (2017) *RECIEL* 60-61. Where gross violations of the right occur, it has been suggested that secession serves as "the ultimate mechanism for protecting group identity and the cultural rights of its members. See Vrodljak "Self-Determination & Cultural Rights" in *Cultural HR* 78.
[37] De Schutter *International HR Law* 773; Genest & Paquerot (2016) *JHRE* 151; Rosas "Self-determination" in *ESCR: A Textbook* 111; A Bloch "Minorities and Indigenous Peoples" in A Eide, C Krause & A Rosas (eds) *Economic, Social and Cultural Rights: A Textbook* 2 ed (2001) 373 374-375.
[38] De Schutter *International HR Law* 773; Rosas "Self-determination" in *ESCR: A Textbook* 111-112.
[39] De Schutter *International HR Law* 773. See also Rosas "Self-determination" in *ESCR: A Textbook* 112.
[40] UNHRC Working Group on the Right to Development *The International Dimensions of the Right to Development* (2018) A/HRC/WG2/19/CRP1 para 115.
[41] Genest & Paquerot (2016) *JHRE* 150.
[42] Wewerinke-Singh *State Responsibility, Climate Change & HR* 100. See also UNGA *Declaration on the Right to Development* (4 December 1986) A/RES/41/128 article 1(1) which states that "every human person and all peoples are entitled to participate in, contribute to [political] development".
[43] Wewerinke-Singh *State Responsibility, Climate Change & HR* 100 & 102. There are numerous impacts on the right of self-determination in relation to climate change and environmental degradation. Many of these are unfortunately outside the scope of this chapter which is focused on an environmental reading of maximum available resources in the Covenant. For further discussion of the environment-related threats to self-determination see Wewerinke-Singh *State Responsibility, Climate Change & HR* 98-104; Atapattu *HR Approaches to Climate Change* 221-241; Maguire & McGee (2017) *RECIEL*; Moore "Waterworld" in *Climate Change & HR* 104-117.
[44] Wewerinke-Singh *State Responsibility, Climate Change & HR* 102. See also Vrodljak "Self-Determination & Cultural Rights" in *Cultural HR* 53.

or threatens their means of subsistence.[45] The former Special Rapporteur on Extreme Poverty and Human Rights, Magdalena Sepúlveda Carmona noted that, given the finite and non-renewable nature of many natural resources, the right to self-determination "needs to be protected with special care, taking into account the rights of future generations".[46] Genest and Paquerot note that the right of self-determination is also "conceptualized as a right of the people to say no" and has been used as such in developing and developed countries.[47] The right of the people to participate in and determine their own development and use of natural resources therefore means that the population of a state and any separate peoples therein are entitled to refuse external control over how their natural resources are used and disposed of. Langford notes, for example, that gross exploitation of natural resources by other states or non-state actors could be deemed an interference with the right of self-determination.[48] Combining the political and resource dimensions of the right, De Schutter argues that:

> "[S]elf-determination means that the peoples, not governments alone, should be making the fundamental choices as to how the resources available should be used: in essence, it is a norm about participatory democracy, particularly in the context of the use, exploitation and allocation of natural resources".[49]

It has also been argued that the freedom to dispose of natural resources places a duty on States Parties to ensure that resource use is in the interests of the people, emphasising this relationship between natural resource use and participation.[50] This is affirmed by the right to development which includes a duty on states to formulate national development policies

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[45] Wewerinke-Singh *State Responsibility, Climate Change & HR* 103; Rosas "Self-determination" in *ESCR: A Textbook* 116. See also *The Social and Economic Rights Action Centre (SERAC) and the Centre for Social and Economic Rights v Nigeria* Communication No 155/96 (2001) ACHPR. Although the *SERAC* judgment does not refer to the right of self-determination directly, the facts illustrate how the state, in cooperation with a foreign entity, can exploit natural resources for its own benefit, to the detriment of the local population. See para 65-66 of the judgment in relation to the impact on food sources as a result of exploitation of oil reserves.

[46] UNHRC *Report of the Special Rapporteur on Extreme Poverty and Human Rights, Magdalena Sepúlveda Carmona* (22 May 2014) A/HRC/26/28 para 18.

[47] Genest & Paquerot (2016) *JHRE* 152.

[48] M Langford "Substantive Obligations" in M Langford, B Porter, R Brown & J Rossi *The Optional Protocol to the International Covenant on Economic, Social and Cultural Rights: A Commentary* (2016) 203 213. The exploitation of natural resources is discussed in further detail at 5 4 2 below.

[49] UNHRC Working Group on the Right to Development *The International Dimensions of the Right to Development* (2018) A/HRC/WG2/19/CRP1 para 115. See also De Schutter "Public Budget Analysis" in *The Future of ESR* 540 where De Schutter argues that "a right to participation flows from the right to self-determination".

[50] R Burchill "Democracy and the Promotion and Protection of Socio-Economic Rights" in MA Baderin & R McCorquodale *Economic, Social and Cultural Rights in Action* (2007) 361 376; De Schutter "Public Budget Analysis" in *The Future of ESR* 540 & 564. See also UNGA *Permanent Sovereignty over Natural Resources* (14 December 1962) Res 1803 (XVIII) and Schrijver *Sovereignty over Natural Resources* 308 where it is asserted that permanent sovereignty includes a duty to exercise sovereignty over natural resources for national development and for the well-being of the people.

on the basis of the entire population's "active, free and meaningful participation in development" as well as the "fair distribution of the benefits resulting therefrom".[51]

As noted above, article 1(2) of the Covenant specifically prohibits deprivation of a people's means of subsistence. In other words, the natural wealth and resources of a people may not be disposed of or threatened to such a degree that they are unable to meet their basic needs.[52] Rosas notes that this provision "builds a bridge" between the right of self-determination and basic individual rights such as the right to an adequate standard of living in article 11.[53] The Committee has recognised the importance of access to natural resources in relation to the right to work and the people's livelihoods in its concluding observations in relation to Israel, although self-determination is not explicitly mentioned.[54] There the Committee noted obstacles to the right to work of Palestinian fishermen and called on the State Party to "recognize and respect the right of the Palestinian people to the marine resources, including the right to fish in the territorial sea and Exclusive Economic Zone of the Gaza Strip".[55] Lankford, Darrow and Rajamani argue that deprivation of a peoples' means of subsistence as a result of severe environmental degradation "would constitute a serious abridgement of the right to self-determination".[56] It has also been argued that the illicit movement and dumping of toxic waste is a threat to self-determination and the freedom to dispose of natural resources.[57] In this regard the principle of prior informed consent under IEL (distinguishable from the concept of FPIC applicable to indigenous peoples) can be understood as a mechanism to promote self-determination and prevent damage to the natural wealth and resources of a state.[58] In light of the above, the obligation to use the

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[51] UNGA *Declaration on the Right to Development* (4 December 1986, A/RES/41/128) article 2(3). See also the description of "development" in the preamble.

[52] The right of self-determination in the African Charter refers to a peoples' right of existence. See African Charter on Human and Peoples' Rights (adopted 27 June 1981, entered into force 21 October 1986) 1520 UNTS 217 article 20. See also MA Baderin "The African Commission on Human and Peoples' Rights and the Implementation of Economic, Social and Cultural Rights in Africa" in MA Baderin & R McCorquodale *Economic, Social and Cultural Rights in Action* (2007) 139 160-161.

[53] Rosas "Self-determination" in *ESCR: A Textbook* 118.

[54] CESCR *Concluding Observations, Israel* (16 December 2011) E/C12/ISR/CO/3 para 12.

[55] CESCR *Israel* (2011) para 12.

[56] S McInerney-Lankford, M Darrow & L Rajamani *Human Rights and Climate Change: A Review of the International Legal Dimensions* (2011) 35-36.

[57] See UN Economic and Social Council *Report of the Special Rapporteur on Toxic Waste, Fatma-Zohra Ouhachi-Vesely: Adverse Effects of the Illicit Movement and Dumping of Toxic and Dangerous Products and Wastes on the Enjoyment of Human Rights* (2001) E/CN4/2001/55 para 58; UNHRC *Preliminary Report* (2012) A/HRC/22/43 para 21.

[58] Prior informed consent under IEL relates to the consent required from a state prior to a potentially harmful activity such as the transboundary movement of chemicals, waste or genetic resources. This is governed by treaties such as the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (adopted 22 March 1989, entered into force 5 May 1992) 1673 UNTS 126. Although some authors discuss prior informed consent in conjunction with the principle of FPIC, it is submitted that the two overlapping concepts are distinct and should not be conflated as this could water-down or obscure the

maximum of available resources for the progressive realisation of ESCRs must include an obligation on the State Party to protect the natural resources of its own people and people of other states, particularly where their means of subsistence are implicated. This would include not only natural resources necessary for health, food and water, but also those necessary for livelihoods and development.

Article 1(2) of the Covenant qualifies the right to dispose of natural wealth and resources by stating that it is "without prejudice to any obligations arising out of international economic co-operation, based upon the principle of mutual benefit, and international law". As Rosas explains, this provision relates to, among other things, "the restraints international law may place on the right of states and peoples to nationalize and confiscate foreign property".[59] This qualification in article 1(2) must be read in conjunction with article 25 which states that "[n]othing in the present Covenant shall be interpreted as impairing the inherent right of all peoples to enjoy and utilize fully and freely their natural wealth and resources".[60] In other words, although there may be exceptions in certain areas governed by international law, such as multilateral environmental agreements to which a state is a party, the emphasis remains on the full and free enjoyment and utilisation of natural resources, not only by States Parties, but by all peoples. In light of the context of decolonisation, article 25 ensures that previously occupied or dominated states are given the freedom to choose how their natural wealth and resources are used, without undue interference and control by external actors such as international corporations.[61] As Barral notes, "control over resources thus ensured that independence was not just an empty shell, but a concrete attribute which would pave the way to economic development".[62] It is unclear from article 25 itself or from the Committee's doctrine precisely what relevance this provision has outside of this context of decolonisation. It would, however, be wholly inconsistent with the object and purpose of the

particular rights of indigenous peoples. See, for example, G Roller "Prior Informed Consent" in L Krämer & E Orlando (eds) *Principles of Environmental Law* (2018) 338 338-350. In relation to FPIC, see Chapter 2, 2 2 2.

[59] Rosas "Self-determination" in *ESCR: A Textbook* 116.

[60] ICESCR article 25. See also International Covenant on Civil and Political Rights (adopted 16 December 1966, entered into force 23 March 1976) 999 UNTS 171 article 47.

[61] In relation to national sovereignty over natural resources, Barral notes that after decolonisation "newly independent States affirmed their permanent sovereignty over natural resources […] as a means to claim back what they 'owned' (i.e. natural resources located within their territory) from the foreign corporations that were exploiting them". See V Barral "National Sovereignty" in E Morgera & K Kulovesi (eds) *Research Handbook on International Law and Natural Resources* (2016) 3 3. See also M Langford, F Coomans & F Gómez Isa "Extra-territorial duties in international law" in M Langford, W Vandenhole, M Scheinin & W van Genugten (eds) *Global Justice, State Duties: The Extra-Territorial Scope of Economic, Social and Cultural Rights in International Law* (2014) 51 77.

[62] Barral "National Sovereignty" in *International Law & Natural Resources* 3.

Covenant to interpret article 25 as permitting unfettered exploitation of natural resources, regardless of the resultant detrimental impacts on the environment and ESCRs.[63]

It is important to emphasise that, in contrast to the principle of sovereignty over natural resources, the right of self-determination is a collective right of peoples and not a right attributable to the state itself.[64] Van der Vyver suggests that common article 1 constitutes the inclusion of the principle of state sovereignty in the ICESCR and ICCPR and "marks a shift away from designating the right over natural resources as an integral part of state sovereignty, and toward proclaiming it more specifically as a component of the human right of peoples to self-determination".[65] As opposed to sovereignty's emphasis on the notion of the state, self-determination underscores the well-being of the people and their participation in their own social, economic and cultural development. Genest and Paquerot argue that the participatory dimension of self-determination places limitations on state sovereignty. In their view, sovereignty "is only justified to the extent that it translates the self-determination of the people – who themselves are in a situation of legitimate political contestation when their rights are not respected".[66] This interpretation of sovereignty is consistent with the Covenant and the contents of the right of self-determination in article 1.

Self-determination therefore does not provide for the exploitation of natural resources by the state where the people do not participate or benefit from such exploitation.[67] The freedom to dispose of natural resources is not a licence for States Parties to do whatever they want with their natural resources without consequence. Instead it seeks to give effect to the will of the people and to prevent undue interference and intervention from external forces in the management, use and allocation of its natural wealth and resources. The use and disposal of these resources should be for the benefit of the people and should be understood in the context of their participation and self-determination.[68] A State Party is obligated to use its natural resources for the progressive realisation of ESCRs or more broadly for the benefit and well-being of the people. A State Party is not using the maximum of its available resources for the realisation of Covenant rights if its natural resources are

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[63] See Chapter 3, 3 3 2 3 and 3 3 3 for a discussion of teleological interpretation.
[64] J van der Vyver "Sovereignty" in D Shelton (ed) *The Oxford Handbook of International Human Rights Law* (2013) 379 386-387.
[65] Van der Vyver "Sovereignty" in *Oxford Handbook of International HR Law* 386-387.
[66] Genest & Paquerot (2016) *JHRE* 152.
[67] See, for example, Leib *HR and the Environment* 142; De Schutter "Public Budget Analysis" in *The Future of ESR* 564.
[68] Schrijver describes one of the duties associated with permanent sovereignty over natural resources as the exercise of this sovereignty for national development and the well-being of the people. See Schrijver *Sovereignty over Natural Resources* 308; UNGA *Permanent Sovereignty over Natural Resources* (14 December 1962) Res 1803 (XVIII) para 1.

exploited for the financial gain of national or foreign entities with no benefit accruing to the people themselves.

Given the obligation on all States Parties to the Covenant to promote the realisation of the right of self-determination, it is necessary to point out that a people's exercise of the freedom to dispose of natural resources may be limited to the extent that its activities threaten the same right of another state or people.[69] A state or people cannot justify unfettered depletion of its own natural resources where this has the effect of damaging the environment and natural resources of a neighbouring people or state to the extent that their means of subsistence is threatened. Over-exploitation of marine living resources could, for example, threaten the subsistence of neighbouring indigenous peoples or states who rely on those resources for food and livelihoods. Similarly, the unrestrained exploitation of fossil fuels should not be justified on the basis of self-determination and the freedom to exploit natural wealth and resources where the result is the annihilation of small island developing states and their own right of self-determination and means of subsistence.[70]

The right of self-determination is therefore integral to the use and disposal of natural resources and, by extension, a State Party's use of maximum available resources for the realisation of ESCRs. Self-determination highlights the importance of the participation of peoples in resource decisions, the necessity of protecting peoples' means of subsistence, and the essential role (and rights) of indigenous peoples in the use and disposal of natural resources. Self-determination also has significant implications for interference in natural resource use by foreign corporations through the exploitation of natural resources.[71]

5 2 3 Environmental considerations and constraints on sovereignty and self-determination

While both state sovereignty and self-determination underscore the freedom of states and peoples to use and dispose of natural resources, this freedom may be subject to certain necessary environmental constraints. The principles of IEL discussed in chapter 4 suggest that limitations on the use of natural resources are necessary for the protection of the

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[69] See UNHRC *Report of the Special Rapporteur on Extreme Poverty and Human Rights, Magdalena Sepúlveda Carmona* (22 May 2014) A/HRC/26/28 para 19 which states that "[t]he right to self-determination also underlines the rights of all peoples to 'freely pursue their economic, social and cultural development' and the duty of States to respect that right. This has clear implications for activities that undermine the ability of other States to raise revenue and fund their own development".

[70] Of course, in practice this is a complex example which raises various questions in relation to causation and fault as it is not the exploitation of fossil fuels by a single state or people that can be held solely responsible for these consequences. See Wewerinke-Singh *State Responsibility, Climate Change & HR* 98-104 and Moore "Waterworld" in *Climate Change & HR* 104-117 for a discussion on threats to the right of self-determination as a result of climate change.

[71] The exploitation of natural resources is discussed further at 5 4 2 below.

environment, in relation to both the exercise of state sovereignty as well as the right of self-determination in article 1. However, unlike sovereignty, self-determination is a Covenant right. Where the right of self-determination is interpreted as having a more limited scope this must therefore be consistent with a teleological interpretation of the Covenant. Alternatively, any constraints on article 1 must be justified according to the criteria under article 4.[72]

The no-harm principle serves as a limit to state sovereignty requiring states to ensure that activities on their territory do not harm the territory of another state.[73] Sovereignty over natural resources also includes a duty of cooperation of states in respect of shared resources.[74] This is particularly important in the context of shared watercourses and the exploitation of marine living resources.[75] Given the significant overlap between self-determination and state sovereignty in relation to natural resources, it would be appropriate for similar constraints to apply to article 1 to ensure that the exercise of self-determination does not unduly restrict the freedoms of neighbouring states and peoples in relation to their own use and disposal of natural resources. In the same way that states are required to cooperate in relation to shared resources and the prevention of transboundary environmental harm, neighbouring peoples or traditional and indigenous peoples within the broader population of a state should ensure that their use and disposal of natural resources does not harm the human rights or environment of others.[76] An interpretation of self-determination that ensures the effectiveness of Covenant rights for all, must take such constraints into account.[77] The scope of the right to self-determination should therefore be understood as excluding any exercise of the right that would cause harm to ESCRs or the environment on which they depend.

Barral suggests that the understanding of sovereignty over natural resources in international law has evolved in accordance with the development paradigm of sustainable development. Barral thus argues:

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[72] On limitations under article 4 see, for example, CESCR *General Comment No 13* para 42; CESCR *General Comment No 14* para 28 & 47. See also "The Limburg Principles" (1987) *HR Quarterly* para 46-56; P Alston & G Quinn "The Nature and Scope of States Parties' Obligations under the International Covenant on Economic, Social and Cultural Rights" (1987) 9 *HR Quarterly* 156 192-204; EVO Dankwa & C Flinterman "Commentary by the Rapporteurs on the Nature and Scope of States Parties' Obligations" (1987) 9 *HR Quarterly* 136 143-144; Sepúlveda *Nature of Obligations under the ICESCR* 277-293; M Ssenyonjo *Economic, Social and Cultural Rights in International Law* (2016) 150-154; De Schutter *International HR Law* 344.

[73] See Chapter 4, 4 3 2 2.

[74] See Chapter 4, 4 3 2 2 1 in relation to sovereignty over natural resources.

[75] Such cooperation should also be guided by the principles of intergenerational and intragenerational equity. See Chapter 4, 4 3 1 4 and 4 3 1 5.

[76] Of course, such cases are far less common than the innumerable examples of the activities of states and private actors causing harm to the human rights and environment of (often indigenous) peoples.

[77] See Chapter 3, 3 3 3 2 1 on the principle of effectiveness.

> "[T]he evolution of the conception of development from economic growth to sustainable development may well mean that the principle of permanent sovereignty over natural resources today includes a duty of environmental protection, as only then can permanent sovereignty be exercised in the interest of development and of the well-being of the people of the State".[78]

Barral's proposal recognises humanity's dependence on the environment and would be consistent with the purposes of the Covenant and, in the context of article 1, with the participatory dimension of self-determination. If the principle of integration (the core principle of sustainable development) requires environmental factors to be incorporated within development decisions, then sovereignty and self-determination exercised in the interests of the people should take the environment into account.[79] A failure to consider the environment would allow an exercise of sovereignty that depletes the natural resources humanity depends on for survival and would fail to ensure the sustainable use and disposal of natural resources for the sake of future generations. Such an interpretation of self-determination and sovereignty would therefore be inconsistent with the object and purpose of the Covenant.

Turning to the principle of sustainable use, Redgwell describes it as a constraint on sovereignty and on natural resource development decisions.[80] The freedom to use and dispose of natural resources for peoples exercising the right to self-determination should similarly be constrained. The use and exploitation of natural resources should be implemented with the longevity of the resources in mind.[81] States Parties (and peoples exercising the right of self-determination) should use and dispose of natural resources sustainably in order to ensure that these resources are available to continue to support the progressive realisation of ESCRs over the long term.[82] An interpretation of the Covenant that is systematic and teleological indicates that the right of self-determination cannot be understood as unlimited if this renders other ESCRs in the Covenant meaningless.[83] It is therefore essential that, in exercising this right, States Parties limit their use and disposal of

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[78] Barral "National Sovereignty" in *International Law & Natural Resources* 7.
[79] See Chapter 4, 4 3 1 on sustainable development, and see Chapter 4, 4 3 1 2 in relation to the principle of integration.
[80] C Redgwell "Sustainable Use of Natural Resources" in L Krämer & E Orlando (eds*) Principles of Environmental Law* (2018) 115 118. See Chapter 4, 4 3 1 3 for a discussion of sustainable use.
[81] Barral argues that this approach is consistent with the aims of the principle of sovereignty, noting that "the sustainable utilization of resources indeed promotes long-term and healthy economic development, the very object that the principle of permanent sovereignty over natural resources aims to pursue". See Barral "National Sovereignty" in *International Law & Natural Resources* 6-7.
[82] See Chapter 6, 6 3 in relation to progressive realisation, long-term measures, and sustainability.
[83] See Chapter 3, 3 3 2 3 and 3 3 4 3. See also Vienna Convention on the Law of Treaties (adopted 23 May 1969, entered into force 27 January 1980) 1155 UNTS 331 article 31(1) & 31(2).

natural resources to the extent required to protect the environmental base that is vital to the realisation of ESCRs.

In addition to the principle of sustainable use, limits should also be imposed on natural resource use in accordance with the principles of precaution and prevention.[84] Where projects and activities related to the exploitation of natural resources are concerned, precautionary measures should be taken to prevent potentially significant impacts on the environment and human rights, even where such impacts are uncertain. Sovereignty and self-determination may therefore be limited for the protection of the environment and ESCRs. The precautionary principle and the principle of prevention support the limitation of resource use in relation to, for example, CFCs (which cause depletion of the ozone layer) and GHG emissions (which cause climate change and a host of related impacts) as these ultimately result in widespread and long-term harm to ESCRs.

The use of natural resources will require an exercise of due diligence in order to ensure that impacts on human rights, the environment and neighbouring territories are limited. While these obligations of due diligence are often imposed on states, indigenous and traditional peoples exercising the right of self-determination should also be obliged to undertake human rights and environmental impact assessments with respect to natural resource exploitation. In order to ensure the realisation of ESCRs in accordance with the object and purpose of the Covenant, self-determination must be interpreted as including this obligation of due diligence.[85]

5 2 4 Conclusion

The right of self-determination and the principle of state sovereignty over natural resources are foundational for questions of related to resources under article 2(1). A State Party's obligation to take steps to the maximum of its available resources towards the realisation of Covenant rights must be interpreted in the context of both the State Party's freedom to determine its own path and use of resources as well as the constraints of such freedom imposed by IEL, the obligations of States Parties under the Covenant, and the limits of natural resources and the environment. As has been emphasised above, the freedom to use and dispose of natural resources must always be exercised in the interests of the people and the realisation of their ESCRs. With this context in mind, we now turn to the meaning of

[84] See Chapter 4, 4 3 2 3 and 4 3 2 4 above in relation to the preventive and precautionary principles, respectively.
[85] See 5 4 2 4 below with regard to due diligence and impact assessments in the context of natural resource exploitation.

specific aspects of "maximum available resources" in article 2(1), beginning with the meaning of resources.

5 3 The meaning of "resources"

5 3 1 Current interpretation

There is no definition of "resources" within the Covenant and it remains unclear precisely which resources (or categories of resources) should be considered for the realisation of ESCRs.[86] Robertson points out that there is a distinction between the obligation to "take steps" and the resources that may be required to do so, noting that "[g]overnment action is not synonymous with providing a resource" and that "taking a step may be meaningless without an accompanying resource being provided".[87] In other words, resources are often indispensable, but they may require additional steps in order to be put to appropriate use.

Skogly notes that discussions in the drafting phase of the Covenant demonstrate that "resources" was understood to include "both financial and other resources available to the State, broadly interpreted".[88] However, there has been little definition or elaboration on the nature of these "other resources". From early on in the Committee's work it has affirmed that available resources should include both domestic and international resources [89] in accordance with the reference to international assistance and cooperation in article 2(1).[90] The Committee's general comments indicate that a range of resources may be appropriate for realising ESCRs, including legislative, administrative, financial, educational and social resources.[91] However, it is not always clear "what kind of non-financial public resources

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[86] S Skogly "The Requirement of Using the Maximum of Available Resources for Human Rights Realisation: A Question of Quality as Well as Quantity" (2012) 12 *Human Rights Law Review* 393 396 & 398; Uprimny, Hernández & Araújo "Bridging the Gap" in *The Future of ESR* 639.

[87] RE Robertson "Measuring State Compliance with the Obligation to Devote the Maximum Available Resources to Realizing Economic, Social, and Cultural Rights" (1994) 16 *Human Rights Quarterly* 693 695. On the obligation to "take steps", see CESCR *General Comment No 3* para 2-6. See also "The Limburg Principles" (1987) *HR Quarterly* para 16-20; Alston & Quinn (1987) *HR Quarterly* 165; Sepúlveda *Nature of Obligations under the ICESCR* 313; Ssenyonjo *ESCR in International Law* 82-83; M Odello & F Seatzu *The UN Committee on Economic, Social and Cultural Rights: The Law, Process and Practice* (2013) 15-16.

[88] Skogly (2012) *Human Rights Law Review* 398. See also Robertson (1994) *Human Rights Quarterly* 698.

[89] The term "international resources" is used to denote those resources States Parties are obligated to provide in accordance with the obligation of international assistance and cooperation under article 2(1).

[90] CESCR *General Comment No 3: The Nature of States Parties' Obligations (Art 2, Para 1, of the Covenant)* (14 December 1990) E/1991/23 para 13; CESCR *The Obligation to Take Steps to the "Maximum of Available Resources"* para 5; "The Limburg Principles" (1987) *HR Quarterly* 122-135. See also Uprimny, Hernández & Araújo "Bridging the Gap" in *The Future of ESR* 629.

[91] CESCR *General Comment No 3* para 7; CESCR *General Comment No 18: The Right to Work (Art 6 of the Covenant)* (6 February 2006) E/C12/GC/18 para 22; *General Comment No 21: Right of Everyone to Take Part in Cultural Life (Art 15, Para 1(a) of the Covenant)* (21 December 2009) E/C12/GC/21 para 48; CESCR *General Comment No 23: The Right to Just and Favourable Conditions of Work (Article 7 of the Covenant)* (7 April 2016) E/C12/GC/23 para 50; CESCR *General Comment No 24: State Obligations under the International Covenant on Economic, Social and Cultural Rights in the Context of Business Activities* (10 August 2017)

must be considered".[92] Robertson suggests that a permanent and definitive list of resource types may not be possible as "[t]he ongoing process of economic and social evolution is constantly creating different resource needs".[93] Robertson provides the example of information as a resource which was not always recognised as such.[94] More contemporary examples could be found in the form of various technological resources which would not have been considered at the time the Covenant was drafted.[95] It is therefore necessary to allow for adaptation of the Covenant's terminology to new and changing resources and needs, and in accordance with the evolutive approach to interpretation.[96]

Bearing in mind the constant evolution and development of resource needs, there are certain categories of resources which commentators have identified as relevant for the realisation of ESCRs. For example, Robertson recognises the categories of human resources, technological resources, information resources, natural resources, and financial resources.[97] Skogly similarly refers to natural resources, human resources, cultural and scientific resources, and financial resources, as well as related educational, administrative and legislative measures.[98] With regard to international resources, Skogly identifies two types, namely bilateral development assistance or cooperation, and multilateral cooperation through international institutions.[99] Elson, Balakrishnan and Heintz propose that resources include "human, technological, organisational, natural, informational and financial resources, both public and private".[100] Aside from these resource types, it is useful to note that the resources available to the state for the realisation of ESCRs can be also be classified according to their sources, for example, as domestic or international and public or private.

In addition to the ubiquitous financial resources, a number of the categories proposed by the commentators above have been referred to by the Committee, although not always in the context of maximum available resources. In its general comments, for example, the

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E/C12/GC/24 para 14. See also "The Limburg Principles" (1987) *HR Quarterly* para 17; CESCR *The Obligation to Take Steps to the "Maximum of Available Resources"* para 3.

[92] Uprimny, Hernández & Araújo "Bridging the Gap" in *The Future of ESR* 639.

[93] Robertson (1994) *Human Rights Quarterly* 695.

[94] Robertson (1994) *Human Rights Quarterly* 695.

[95] An example of this could be the use of the internet as a resource, the importance or relevance of which would not have been evident in 1994 when Robertson wrote this article, or indeed when the Covenant was drafted.

[96] See Chapter 3, 3 3 3 2 2 on the evolutive approach.

[97] Robertson (1994) *Human Rights Quarterly* 695-697.

[98] Skogly (2012) *Human Rights Law Review* 404-413.

[99] Skogly (2012) *Human Rights Law Review* 417-419.

[100] D Elson, R Balakrishnan & J Heintz "Public Finance, Maximum Available Resources and Human Rights" in A Nolan, R O'Connell & C Harvey (eds) *Human Rights and Public Finance: Budgets and the Promotion of Economic and Social Rights* (2013) 13 39.

Committee makes reference to a number of non-financial resources including human,[101] natural,[102] medical,[103] technological,[104] cultural,[105] genetic[106] and water[107] resources. Many of these references to non-financial resources do not appear in the context of discussing what resources are "available" to the state under article 2(1), but they do provide a broad indication of what the Committee considers as "resources".[108] General Comment 14 provides an example of an obligation which relates to non-financial resources.[109] The Committee requires States Parties to "cooperate in providing disaster relief and humanitarian assistance in times of emergency".[110] Although this obligation only applies in a circumscribed context, it is clear that the resources required for such relief and assistance will often include non-financial resources such as food, water, and medical supplies and services.[111] Similarly, the Committee's statement in relation to the COVID-19 pandemic refers to non-financial resources from international assistance and cooperation in the form of "the sharing of research, medical equipment and supplies, and best practices in combating the virus".[112]

Despite the potential relevance of a range of resources, however, the Committee's work has "focused almost exclusively on financial resources".[113] There is of course no doubt that financial or economic resources are of fundamental importance for the progressive realisation of ESCRs, and commentators have similarly centred the discussion of maximum available resources on financial and economic resources.[114] As Skogly notes, "rather than

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[101] CESCR *General Comment No 19: The Right to Social Security (Art 9 of the Covenant)* (4 February 2008) E/C12/GC/19 para 68; CESCR *General Comment No 21: Right of Everyone to Take Part in Cultural Life (Art 15, Para 1(a) of the Covenant)* (21 December 2009) E/C12/GC/21 para 37.
[102] CESCR *General Comment No 4: The Right to Adequate Housing (Art 11(1) of the Covenant)* (13 December 1991) E/1992/23 para 8(b); CESCR *General Comment No 12: The Right to Adequate Food (Art 11 of the Covenant)* (12 May 1999) E/C12/1999/5 para 12 & 25; CESCR *General Comment No 15: The Right to Water (Arts 11 and 12 of the Covenant)* (20 January 2003) E/C12/2002/11 para 8; CESCR *General Comment No 24* para 18. Natural resources are discussed in more detail at 5 3 2 and 5 4 2 below.
[103] CESCR *General Comment No 14: The Right to the Highest Attainable Standard of Health (Art 12 of the Covenant)* (11 August 2000) E/C12/2000/4 para 40 & 65.
[104] CESCR *General Comment No 15* para 18; CESCR *General Comment No 23* para 67.
[105] CESCR *General Comment No 21* para 15(b) & 68.
[106] CESCR *General Comment No 21* para 37. See also CESCR *General Comment No 24* para 24.
[107] CESCR *General Comment No 14* para 40 & 65; CESCR *General Comment No 15*.
[108] For example, CESCR *General Comment No 21* para 15 refers to human and genetic resources in the context of "manifestations of [indigenous peoples'] sciences, technologies and cultures" and not as resources of the state to be used for the realisation of ESCRs.
[109] CESCR *General Comment No 14* para 40. See also Skogly (2012) *Human Rights Law Review* 403-404.
[110] CESCR *General Comment No 14* para 40.
[111] CESCR *General Comment No 14* para 40 notes that "[p]riority in the provision of international medical aid, distribution and management of resources, such as safe and potable water, food and medical supplies, and financial aid should be given to the most vulnerable or marginalized groups of the population".
[112] CESCR *Statement on the Coronavirus Disease (COVID-19) Pandemic and Economic, Social and Cultural Rights* (6 April 2020) E/C12/2020/1 para 19.
[113] Uprimny, Hernández & Araújo "Bridging the Gap" in *The Future of ESR* 629 & 639.
[114] Skogly (2012) *Human Rights Law Review* 400-401 & 404.

discussing creatively what kind of resources may be available and how they should be used, the discussion has focused on prioritising when financial resources are – or have been made – available".[115]

With regard to financial resources, much focus has been placed on budgetary allocations or state expenditure in relation to ESCRs.[116] Uprimny, Hernández and Araújo note that the Committee's emphasis has been on budgets, international development assistance, debt and tax issues.[117] Arguing for a broader view of financial resources, Dowell-Jones notes that state expenditure alone is unable to "capture the diversity of possible institutional arrangements"[118] or appropriately provide for the range of rights and economic actors involved in fulfilling Covenant obligations.[119] Dowell-Jones argues that maximum available resources for the purposes of article 2(1) concerns "broad economic capacity rather than a narrow notion of State budgetary appropriations".[120] Uprimny, Hernández and Araújo identify five interrelated dimensions of these resources, namely "government expenditure, government revenue, development assistance, debt and deficit financing and monetary policy and financial regulation".[121] Skogly notes that while some authors have extended the concept of resources beyond the realm of national budgeting, the resources considered are still confined to financial ones.[122]

The distinction between financial and non-financial resources has been described in terms of a quantitative and qualitative approach to resources.[123] Skogly describes the emphasis on financial resources as a quantitative approach, as it centres on the amount of resources set aside for ESCRs, often in relation to budgetary allocations.[124] As Skogly points out, this is an understandable result of the use of the term "maximum" in article 2(1) which encourages an assessment of the amount of resources used.[125] However, a purely quantitative approach obscures other resources that may have relevance for ESCRs.[126] Natural resources, for example, have relevance as resources which directly assist in the

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[115] Skogly (2012) *Human Rights Law Review* 402.
[116] 404.
[117] Uprimny, Hernández & Araújo "Bridging the Gap" in *The Future of ESR* 639.
[118] M Dowell-Jones *Contextualising the International Covenant on Economic, Social and Cultural Rights: Assessing the Economic Deficit* (2004) 51.
[119] Dowell-Jones *Contextualising the ICESCR: Assessing the Economic Deficit* 47-51.
[120] Dowell-Jones *Contextualising the ICESCR: Assessing the Economic Deficit* 48.
[121] Uprimny, Hernández & Araújo "Bridging the Gap" in *The Future of ESR* 641.
[122] Skogly (2012) *Human Rights Law Review* 402-403.
[123] 404.
[124] 404.
[125] 404.
[126] See Skogly (2012) *Human Rights Law Review* 404. The role of natural resources is discussed further at 5 3 2 below.

fulfilment of certain ESCRs, while certain types of natural resources also serve as commodities that could contribute to a State Party's available financial resources. A qualitative approach considers a broader variety of resource types while also relating these to the "'means' of implementation such as administrative, financial, educational and social measures, and legislation".[127] In other words, a qualitative approach not only recognises the relevance of non-financial resources, but includes a consideration of the quality of these resources and the effectiveness of how these resources are put to use. Skogly argues that "more effective and targeted use of the existing available financial and non-financial resources may on the one hand make up for lack of economic resources, and on the other be more sustainable in the long term".[128] Given the relationship between natural resources and the quality of the environment on which many ESCRs depend, a qualitative approach to natural resources is essential for an interpretation of the Covenant that integrates environmental considerations.

The Committee has confirmed on numerous occasions that the "maximum of available resources" at the disposal of a state includes those resources which can be obtained through international assistance and cooperation.[129] A State Party relying on a lack of available resources to justify a failure to meet its obligations must show that it sought such international support.[130] In General Comment 22, for example, the Committee states the following:

> "In compliance with article 2(1), States that are not able to comply with their obligations and that cannot realize the right to sexual and reproductive health due to a lack of resources must seek international cooperation and assistance. States that are in a position to do so must respond to such requests in good faith and in accordance with the international commitment of contributing at a minimum 0.7 per cent of their gross national income for international cooperation and assistance".[131]

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[127] Skogly (2012) *Human Rights Law Review* 405

[128] Skogly (2012) *Human Rights Law Review* 405.

[129] CESCR *General Comment No 3* para 13; CESCR *The Obligation to Take Steps to the "Maximum of Available Resources"* para 5. In relation to the obligation of international assistance and cooperation, see "The Limburg Principles" (1987) *HR Quarterly* para 29-30; Dankwa & Flinterman (1987) *HR Quarterly* 140-141; "Maastricht Principles on ETOs" (2011) *Netherlands Quarterly of HR* paras 19-35; Sepúlveda *Nature of Obligations under the ICESCR* 370-377; Ssenyonjo *ESCR in International Law* 109-128; Odello & Seatzu *The UN Committee on ESCR* 18-20; T Karimova "The Nature and Meaning of 'International Assistance and Cooperation' under the International Covenant on Economic, Social and Cultural Rights" in E Riedel, G Giacca & C Golay (eds) *Economic, Social and Cultural Rights in International Law* 163 163-192.

[130] Robertson (1994) *Human Rights Quarterly* 712; CESCR *The Obligation to Take Steps to the "Maximum of Available Resources"* para 5; CESCR *General Comment No 23* para 67. See also CESCR *Concluding Observations, South Africa* (29 November 2018) E/C12/ZAF/CO/1 para 17; CESCR *Concluding Observations, Cabo Verde* (27 November 2018) E/C12/CPV/CO/1 para 12.

[131] CESCR *General Comment No 22: The Right to Sexual and Reproductive Health (Article 12 of the Covenant)* (2 May 2016) E/C12/GC/22 para 50. See also Elson, Balakrishnan & Heintz "Public Finance, Maximum Available Resources & HR" in *HR & Public Finance* 30-31.

It is worth noting that the Committee's concluding observations have also consistently noted its disapproval where developed states have devoted less than 0.7 percent of their Gross National Product to international cooperation and assistance.[132] With regard to the form of international support, De Schutter notes that international resources include resources from foreign direct investment as well as those obtained through development cooperation or the provision of loans.[133] In its 2019 concluding observations in relation to Switzerland, the Committee observed that such international support could include international cooperation for the prevention of tax evasion.[134] The Committee noted its concern that "illicit financial flows from third countries continue to be placed in financial institutions in the State party, thereby curtailing the availability of financial resources vital for the realization of economic, social and cultural rights in those countries".[135] It recommended that the State Party "take strict measures to combat tax evasion […] and intensify its efforts to address global tax abuse".[136]

Of course, it is also possible for international resources to include non-financial resources. Given the wording of article 2(1) it is clear that international assistance and cooperation will, at the very least, include technical assistance and cooperation, implying that the resources required will not be purely financial. For example, in 2019 the Committee urged Mauritius "to seek international support and assistance in order to mobilize the financial and technological support to which it is entitled in mitigating and responding to the effects of climate change".[137] Non-financial international resources may have particular relevance where medical, scientific and technological advancements are concerned.[138] This is confirmed in the Committee's statement in relation to the COVID-19 pandemic where, in the context of international assistance and cooperation, it refers to the sharing of medical supplies as well as research.[139] Scientific research which impacts on (in this case) the right to health, should therefore be understood as a resource available to States Parties which

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[132] See, for example, CESCR *Concluding Observations, Belgium* (26 March 2020) E/C12/BEL/CO/5 para 14-15; CESCR *Concluding Observations, Switzerland* (18 November 2019) E/C12/CHE/CO/4 para 16-17; CESCR *Concluding Observations, Australia* (11 July 2017) E/C12/AUS/CO/5 para 7-8; CESCR *Concluding Observations, Liechtenstein* (3 July 2017) E/C12/LIE/CO/2-3 para 7-8; CESCR *Concluding Observations, The Netherlands* (23 June 2017) E/C12/NLD/CO/6 para 9-10. See also Odello & Seatzu *The UN Committee on ESCR* 19-20; Ssenyonjo (2011) *IJHR* 984-985; Sepúlveda *Nature of Obligations under the ICESCR* 374-375.
[133] De Schutter "Public Budget Analysis" in *The Future of ESR* 582.
[134] CESCR *Concluding Observations, Switzerland* (18 November 2019) E/C12/CHE/CO/4 para 12.
[135] CESCR *Switzerland* (2019) para 12.
[136] CESCR *Switzerland* (2019) para 13.
[137] CESCR *Concluding Observations, Mauritius* (5 April 2019) E/C12/MUS/CO/5 para 10.
[138] See, for example, CESCR *General Comment No 25 on Science and Economic, Social and Cultural Rights* (Art 15(1)(b), 15(2), 15(3) and 15(4)) (7 April 2020) E/C12/GC/25 para 80 where the Committee notes that the benefits of scientific progress must be shared with the international community, particularly where they relate to the enjoyment of ESCRs.
[139] CESCR *Statement on the Coronavirus Disease (COVID-19) Pandemic and ESCRs* para 19.

must be used towards realisation of ESCRs, and must be requested from other States Parties where necessary.[140] This approach is also important with respect to climate change, as scientific research and information regarding impacts as well as mitigation and adaptation measures are crucial for preventing unnecessary harm to ESCRs.

In summary, the meaning of resources in article 2(1) refers to those resources which the state should use to progressively realise ESCRs. It is accepted that these resources include those available from domestic and international sources, as well as public and private sources. Financial resources have (understandably) received the most attention from the Committee and commentators on the Covenant. The importance and relevance of financial resources is not discounted. However, a broader perspective which incorporates both financial and non-financial resources would assist States Parties in making use of their available resources to the maximum, particularly where financial resources are scarce. A broader (and evolving) range of resource types at the disposal of States Parties includes human, natural, technological, informational, cultural and scientific resources. This also includes those financial and non-financial resources available to the State Party through international assistance and cooperation. Given their fundamental relevance for environmental considerations, the role of natural resources is analysed in more detail below, with particular emphasis on the exploitation of natural resources.

5 3 2 The role of natural resources

5 3 2 1 Defining natural resources

Before discussing the relationship between natural resources and ESCRs in the Covenant, it is necessary to discuss the meaning of "natural resources". The term refers to a wide range of resources with varying properties, applications, impacts, and value. Natural resources therefore cover "an extremely heterogeneous area"[141] and cannot be seen as "a single monolithic topic".[142] Perhaps the most common distinction within the concept of natural resources is that between renewable and non-renewable resources. Renewable or flow resources are those which are able to regenerate or renew over a short period of

[140] In this regard, see CESCR *Statement on the Coronavirus Disease (COVID-19) Pandemic and ESCRs* para 21 where the Committee notes that "States parties should also promote flexibilities or other adjustments in applicable intellectual property regimes to allow universal access to the benefits of scientific advancements relating to COVID-19 such as diagnostics, medicines and vaccines".

[141] E Morgera & K Kulovesi "Preface" in E Morgera & K Kulovesi (eds) *Research Handbook on International Law and Natural Resources* (2016) xi.

[142] See Morgera & Kulovesi "Preface" in *International Law and Natural Resources* xi with reference to R Higgins *Problems and Process: International Law and How We Use It* (1994) 129. Higgins also notes that "[a]lmost everything depends, if not on the specific resource, on the category of natural resource that one is studying".

time.[143] Some resources that are in principle renewable may not be deemed practically renewable given the significant period required for this to occur.[144] Non-renewable resources or stock resources have a finite quantity and cannot be regenerated.[145] In addition to the aforementioned categories, the term "exhaustible resources" can be used to refer to are those natural resources which can be depleted and, while this certainly includes finite non-renewable resources, it also includes those renewable resources that could be exhausted through over-exploitation.[146]

From an economic perspective, natural resources are understood in terms of their utility in relation to economic production and consumption.[147] While useful, this approach is not appropriate in the context of the Covenant. A definition such as the one used by Morgera and Kulovesi is more appropriate in this regard. They define natural resources as "materials and processes that exist in nature and that are considered of actual or potential use or value to humans".[148] For example, while clean air may not be considered a commodity for economic production or consumption, it is certainly a resource that State Parties should be required to protect and "mobilise" through pollution prevention and regulation in order to realise the right to health.

There is no clear definition of natural resources in international law.[149] In the context of the Covenant it is necessary to distinguish between natural resources as a broad category of resources which form part of the "maximum available resources" clause,[150] and natural

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[143] See N Schrijver *Sovereignty over Natural Resources: Balancing Rights and Duties* (1997) 13; World Trade Organisation *World Trade Report 2010: Trade in Natural Resources* (2010) 47. Schrijver notes that this period of renewal should be within one generation, whereas the WTO definition describes renewal within an "economically relevant" period.

[144] Schrijver *Sovereignty over Natural Resources* 14; WTO *World Trade Report 2010: Trade in Natural Resources* (2010) 47. For example, oil may technically be described as renewable, but the process of its formation occurs over millions of years and it is therefore not considered renewable in any practical sense.

[145] Schrijver *Sovereignty over Natural Resources* 13; WTO *World Trade Report 2010: Trade in Natural Resources* (2010) 47.

[146] WTO *World Trade Report 2010: Trade in Natural Resources* (2010) 47. Exhaustible renewable resources include, for example, species of fish whose populations are unable to recover from overexploitation and therefore become extinct.

[147] See WTO *World Trade Report 2010: Trade in Natural Resources* (2010) 46 where natural resources are defined as "stocks of materials that exist in the natural environment that are both scarce and economically useful in production or consumption, either in their raw state or after a minimal amount of processing". See also Organisation for Economic Cooperation and Development "Natural Resources" *Glossary of Statistical Terms* (02-12-2005) <https://stats.oecd.org/glossary/detail.asp?ID=1740> (accessed 22-04-2020), where natural resources are defined as "natural assets (raw materials) occurring in nature that can be used for economic production or consumption". The OECD subdivides natural resources into categories of mineral and energy resources; soil resources; water resources; and biological resources.

[148] Morgera & Kulovesi "Preface" in *International Law & Natural Resources* x.

[149] Morgera & Kulovesi "Preface" in *International Law & Natural Resources* x; Schrijver *Sovereignty over Natural Resources* 14-15. Schrijver notes that some treaties have their own definitions. See Schrijver *Sovereignty over Natural Resources* 15.

[150] In this context a definition such as that used by Morgera and Kulovesi would be appropriate. See Morgera & Kulovesi "Preface" in *International Law & Natural Resources* x.

resources as a specific term appearing in articles 1 and 25 of the Covenant which may require a more precise definition.[151] As far as the Committee's approach is concerned, its concluding observations often make reference to natural resources in broad terms, usually in the context of article 1 or the rights of indigenous peoples (or both).[152] However, in some cases the Committee has referred to natural resources in the context of discussing specific resources, indicating that, at the very least, these resources would form part of what is meant by "natural resources". A review of the Committee's concluding observations reveals that it understands natural resources to include minerals;[153] oil;[154] gas; hydrocarbons;[155] forests and forest resources;[156] as well as fauna and biological and aquatic resources.[157] In General Comment 15 the Committee also refers to water as "a limited natural resource".[158] A broader approach to natural resources, such as the one used by Morgera and Kulovesi,[159] could include extractible natural resources such as flora and fauna; marine living resources; water; minerals; soil; and more complex natural materials and processes such as the atmosphere; biodiversity; ecosystems; and the climate system.[160] These resources should be regulated, managed and mobilised so as to progressively realise ESCRs, and should therefore be included in the scope of maximum available resources.

As noted above, the characteristics of natural resources are varied and, given the wide range of natural resources potentially relevant for ESCRs and maximum available resources, it is important to note that the treatment and assessment of natural resources will differ according to the particular natural resource or category of natural resources at issue.

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[151] Articles 1 and 25 are discussed at 5 2 2 above. See also articles 1 and 47 of the ICCPR. Natural resources in the context of these provisions could be understood, at a minimum, to include those extractible natural resources which are of economic value.

[152] CESCR *Concluding Observations, Cambodia* (12 June 2009) E/C12/KHM/CO/1 para 15-16; CESCR *Concluding Observations, Russian Federation* (1 June 2011) E/C12/RUS/CO/5 para 7; CESCR *Concluding Observations, Gabon* (27 December 2013) E/C12/GAB/CO/1 para 6; CESCR *Concluding Observations, El Salvador* (19 June 2014) E/C12/SLV/CO/3-5 para 27; CESCR *Concluding Observations, Ecuador* (7 June 2004) E/C12/1/Add100 para 12; CESCR *Concluding Observations, Morocco* (22 October 2015) E/C12/MAR/CO/4 para 5-6; CESCR *Concluding Observations, Paraguay* (20 March 2015) E/C12/PRY/CO/4 para 6; CESCR *Concluding Observations, Honduras* (11 July 2016) E/C12/HND/CO/2 para 11-12.

[153] CESCR *Concluding Observations, Israel* (12 November 2019) E/C12/ISR/CO/4 para 14-15; CESCR *Concluding Observations, Venezuela* (7 July 2015) E/C12/VEN/CO/3 para 9; CESCR *El Salvador* (2014) para 27; CESCR *Concluding Observations, Guatemala* (9 December 2014) E/C12/GTM/CO/3 para 6-7; CESCR *Cambodia* (2009) para 16; CESCR *Concluding Observations, Chad* (16 December 2009) E/C12/TCD/CO/3 para 13.

[154] CESCR *Israel* (2019) para 14-15; CESCR *Concluding Observations, Congo* (2 January 2013) E/C12/COG/CO/1 para 12; CESCR *Cambodia* (2009) para 16; CESCR *Chad* (2009) para 13.

[155] CESCR *Venezuela* (2015) para 9; CESCR *El Salvador* (2014) para 27.

[156] CESCR *Cambodia* (2009) para 15.

[157] CESCR *Russian Federation* (2011) para 7.

[158] CESCR *General Comment No 15* para 1.

[159] Morgera & Kulovesi "Preface" in *International Law & Natural Resources* x.

[160] Of course, this does not necessarily mean that all of these resources would be relevant or appropriate for the more specific scope of articles 1 and 25. See 5 2 above.

This is evidenced by the separate international legal regimes dealing with, for example, marine living resources,[161] freshwater resources,[162] and biodiversity.[163] Understanding natural resources and their relationship to the broader environment is the function of scientists of various specific disciplines such as ecologists, hydrologists, botanists and meteorologists. As natural resources implicate complex ecological processes and their use and exploitation is coupled with a host of potential impacts and consequences, it is essential to note that decision-making regarding natural resources will require appropriate expertise.[164] It is also essential to understand that although international law and human rights operate within a framework of statehood and territorial boundaries, natural resources do not respect such boundaries.[165] Any effective approach to natural resources must therefore reconceptualise our understanding of state sovereignty accordingly.[166]

5 3 2 2 The Covenant and natural resources

Turning to the relationship between natural resources and Covenant rights, it is undeniable that natural resources are essential for the enjoyment of ESCRs.[167] As Francioni notes, "[n]atural resources sustain livelihoods, unite peoples, provide the source for the satisfaction of their basic needs and are the material foundation of their enjoyment of human rights".[168] Leib also emphasises this relationship between natural resources and ESCRs, noting that "the management or mismanagement of natural resources, whether renewable or not, has tremendous effect on people's livelihoods".[169] Significantly, impacts on natural resources disproportionately affect the poor as "[t]he livelihoods of 70 per cent of people

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[161] See Sands P, J Peel, AF Aguilar & R Mackenzie *Principles of International Environmental Law* 4 ed (2018) 506-547; P Dupuy & JE Viñuales *International Environmental Law* (2018) 206-212; C Salpin "Marine Genetic Resources of Areas beyond National Jurisdiction: Soul Searching and the Art of Balance" in E Morgera & K Kulovesi (eds) *Research Handbook on International Law and Natural Resources* (2016) 411 411-431; UN Convention on the Law of the Sea (adopted 10 December 1982, entered into force 16 November 1994) 1833 UNTS 3.

[162] See O McIntyre "Water" in E Morgera & K Kulovesi (eds) *Research Handbook on International Law and Natural Resources* (2016) 305 305-326; Sands et al *Principles of IEL* 360-366; Convention on the Law of the Non-navigational Uses of International Watercourses (adopted 21 May 1997, entered into force 17 August 2014) UN Doc A/51/869.

[163] See Sands et al *Principles of IEL* 384-451; Dupuy & Viñuales *International Environmental Law* 234-247; Convention on Biological Diversity (adopted 5 June 1992, entered into force 29 December 1993) 1760 UNTS 79.

[164] A sustainable development paradigm would require an integrated consideration of social, economic and environmental factors, therefore requiring expertise from each of the three areas.

[165] V Barral "National Sovereignty over Natural Resources: Environmental Challenges and Sustainable Development" in E Morgera & K Kulovesi (eds) *Research Handbook on International Law and Natural Resources* (2016) 3 4 & 10.

[166] See Barral "National Sovereignty" in *International Law & Natural Resources* 3-25. See 5 2 above in relation to sovereignty and self-determination.

[167] See Chapter 2, 2 2.

[168] Francioni "Natural Resources and HR" in *International Law & Natural Resources* 66.

[169] Leib *HR and the Environment* 141.

living in poverty directly depend on natural resources".[170] Those dependent on natural resources for their livelihoods are often indigenous peoples or peasants and other people working in rural areas.[171] Natural resources contribute to ESCRs through revenue generated from their exploitation, as well as directly through the provision of elements of the environment necessary for ESCRs such as clean water to drink, clean air to breathe, and fertile soil to produce food.[172]

The direct relevance of the state of natural resources for the realisation of ESCRs indicates that the qualitative condition of natural resources is an important consideration for the realisation of Covenant rights.[173] Access to air, soil and water is of little use for the realisation of the rights to health or an adequate standard of living if these resources are severely polluted or degraded. A qualitative approach to natural resources and ecosystem functions is supported by the work of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services ("IPBES"). In its 2019 report the IPBES notes, for example, that "[i]ncorporating the consideration of the multiple values of ecosystem functions and of nature's contributions to people into economic incentives has, in the economy, been shown to permit better ecological, economic and social outcomes".[174]

The manner in which natural resources should be used for ESCRs is not always clear. Natural resource exploitation often results in violations of human rights either as a result of degraded natural resources threatening ESCRs, or as a result of the profits of such activities being prioritised over the needs and rights of local communities.[175] However, the exploitation of natural resources may have significant advantages for ESCRs, as "it can support the realization of economic and social rights by providing employment, social welfare, public

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[170] See UNEP *GEO-6: Summary for Policymakers* 9.

[171] In relation to the rights of indigenous peoples and peasants see, respectively, UNGA *United Nations Declaration on the Rights of Indigenous Peoples* (2 October 2007) A/RES/61/295; UNGA *United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas* (21 January 2019) A/RES/73/165.

[172] See Chapter 2, 2 2 1 in relation to ecosystem services.

[173] See Skogly (2012) *Human Rights Law Review* and 5 3 1 above in relation to a qualitative approach to resources.

[174] IPBES "Summary for policymakers" in S Díaz, J Settele, ES Brondízio, HT Ngo, M Guèze, J Agard, A Arneth, P Balvanera, KA Brauman, SHM Butchart, KMA Chan, LA Garibaldi, K Ichii, J Liu, SM Subramanian, GF Midgley, P Miloslavich, Z Molnár, D Obura, A Pfaff, S Polasky, A Purvis, J Razzaque, B Reyers, R Roy Chowdhury, YJ Shin, IJ Visseren-Hamakers, KJ Willis & CN Zayas (eds) *Global Assessment Report on Biodiversity and Ecosystem Services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services* (2019) 14.

[175] It is necessary to note that local communities will often, but not always, include indigenous peoples as well as peasants and other people working in rural areas. The latter groups or communities have additional rights under relevant UN Declarations. See UNGA *United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas* (21 January 2019) A/RES/73/165 and UNGA *United Nations Declaration on the Rights of Indigenous Peoples* (2 October 2007) A/RES/61/295.

revenues and a general improvement of the conditions of life of the society".[176] The role and impact of natural resource exploitation is discussed below in the context of the availability of resources.[177] For many States Parties, the revenue generated from the exploitation of natural resources is integral to their capacity to fulfil ESCRs. The former Special Rapporteur on Extreme Poverty and Human Rights, Magdalena Sepúlveda Carmona noted the following in relation to the benefits of natural resources:

> "At the very least, a State's population has a right to enjoy a fair share of the financial and social benefits that natural resources can bring. This requires ensuring participation, access to information and high standards of transparency and accountability in decision-making about the use of natural resources. Where indigenous peoples are involved, States have additional and specific obligations, including ensuring free, prior and informed consent in any decisions regarding the use of their lands".[178]

Whatever choices States Parties make with regard to the management, regulation, exploitation or protection of their natural resources, it is evident that there will be significant implications for ESCRs, whether for good or for bad. To ensure that the use of natural resources has a positive impact and promotes ESCRs, it is essential to consider the role that natural resources play in the realisation of these rights.

In its concluding observations, the Committee's references to natural resources appear in relation to the recognition and protection of indigenous rights to natural resources;[179] access to natural resources;[180] the consultation and consent of local communities or indigenous peoples in the context of the exploitation of natural resources;[181] the detrimental impacts of natural resource exploitation on ESCRs;[182] the need to assess the environmental

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[176] Francioni "Natural Resources and Human Rights" in *International Law & Natural Resources* 67.
[177] See 5 4 2 below.
[178] UNHRC *Report of the Special Rapporteur on Extreme Poverty and Human Rights, Magdalena Sepúlveda Carmona* (22 May 2014) A/HRC/26/28 para 18.
[179] CESCR *El Salvador* (2014) para 27; CESCR *Ecuador* (2019) para 15-16; CESCR *Concluding Observations, Costa Rica* (21 October 2016) E/C12/CRI/CO/5 para 8-9; CESCR *Concluding Observations, Argentina* (14 December 2011) E/C12/ARG/CO/3 para 9; CESCR *Venezuela* (2015) para 9; CESCR *Concluding Observations, Norway* (23 June 2005) E/C12/1/Add109 para 26; CESCR *Concluding Observations, Chile* (7 July 2015) E/C12/CHL/CO/4 para 8; CESCR *Concluding Observations, Paraguay* (20 March 2015) E/C12/PRY/CO/4 para 6; CESCR *Cameroon* (2019) para 12-13; CESCR *Guatemala* (2014) para 6.
[180] CESCR *Concluding Observations, United Republic of Tanzania* (13 December 2012) E/C12/TZA/CO/1-3 para 23; CESCR *Honduras* (2016) para 11-12; CESCR *Israel* (2019) para 14-15; CESCR *Russian Federation* (2011) para 7; CESCR *Cameroon* (2019) para 16-17.
[181] CESCR *El Salvador* (2014) para 27; CESCR *Honduras* (2016) para 11-12; CESCR *Concluding Observations, Uganda* (8 July 2015) E/C12/UGA/CO/1 para 13; CESCR *Concluding Observations, Nicaragua* (28 November 2008) para 11; CESCR *Argentina* (2011) para 9; CESCR *Concluding Observations, Thailand* (19 June 2015) E/C12/THA/CO/1-2 para 10; CESCR *Russian Federation* (2011) para 7; CESCR *Concluding Observations, Peru* (30 May 2012) E/C12/PER/CO/2-4 para 23; CESCR *Guatemala* (2014) para 7; CESCR *Concluding Observations, Mexico* (17 April 2018) E/C12/MEX/CO/5-6 para 12-13.
[182] CESCR *Burkina Faso* (2016) para 13-14; CESCR *Concluding Observations, Madagascar* (16 December 2009) E/C12/MDG/CO/2 para 33; CESCR *Honduras* (2016) para 41-42; CESCR *Argentina* (2011) para 9; CESCR *Thailand* (2015) E/C12/THA/CO/1-2 para 10; CESCR *Concluding Observations, Ecuador* (7 June

and human rights impacts of such exploitation;[183] and the role of the exploitation of natural resources in maximising revenue available for ESCRs.[184] The Committee recognises that degradation of natural resources may have a negative impact on ESCRs, but its concluding observations do not explicitly recognise the relevance that the natural resources themselves have to the obligation of using the maximum of available resources outside of the financial revenue they may generate. In others words, the qualitative dimension of natural resources, including their inherent capacity to support ESCRs, is overlooked.

In its general comments the Committee's references to natural resources focus on access to natural resources. General Comment 4 on the right to adequate housing includes sustainable access to natural resources in a list of "services, materials, facilities and infrastructure" that should be available to beneficiaries of the right.[185] Although the Committee does not elaborate on the scope of these natural resources, the context suggests that it would likely include access to water (for drinking, cooking and sanitation) and access to natural sources of fuel.[186] In its general comment on the right to food the Committee notes that the availability of food includes "the possibilities either for feeding oneself directly from productive land or other natural resources",[187] and states that "[c]are should be taken to ensure the most sustainable management and use of natural and other resources for food".[188] The general comment also refers to natural resources in the context of "guarantees of full and equal access to economic resources, particularly for women".[189] In General Comment 24 the Committee refers to natural resources in the context of the impacts of the exploitation of natural resources[190] and the recognition of the rights of indigenous peoples to their lands and natural resources.[191]

2004) E/C12/1/Add100 para 12; CESCR *Concluding Observations, Colombia* (19 October 2017) E/C12/COL/CO/6 para 15-16; CESCR *Cameroon* (2019) para 16-17

[183] CESCR *Honduras* (2016) para 41-42; CESCR *Argentina* (2018) para 18-19; CESCR *Chile* (2015) para 11; CESCR *Colombia* (2017) para 15-18; CESCR *Cambodia* (2009) para 15-16; CESCR *Chad* (2009) para 13; CESCR *Cameroon* (2019) para 16-17; CESCR *Mexico* (2018) para 12-13.

[184] See, for example CESCR *Central African Republic* (2018) para 16; CESCR *Concluding Observations, Mali* (6 November 2018) E/C12/MLI/CO/1 para 12-13; CESCR *Congo* (2013) para 12; CESCR *Chad* (2009) para 23.

[185] CESCR *General Comment No 4* para 8(b).

[186] CESCR *General Comment No 4* para 8(b) states as follows "All beneficiaries of the right to adequate housing should have sustainable access to natural and common resources, safe drinking water, energy for cooking, heating and lighting, sanitation and washing facilities, means of food storage, refuse disposal, site drainage and emergency services".

[187] CESCR *General Comment No 12* para 12.

[188] Para 25.

[189] Para 26.

[190] CESCR *General Comment No 24* para 8 & 18.

[191] CESCR *General Comment No 24* para 52.

The relationship between indigenous peoples and natural resources also forms part of General Comment 21 on the right to take part in cultural life. The Committee notes that:

> "Indigenous peoples' cultural values and rights associated with their ancestral lands and their relationship with nature should be regarded with respect and protected, in order to prevent the degradation of their particular way of life, including their means of subsistence, the loss of their natural resources and, ultimately, their cultural identity".[192]

The general comment requires States Parties to respect the rights of indigenous peoples to "maintain and strengthen their spiritual relationship with their ancestral lands and other natural resources traditionally owned, occupied or used by them, and indispensable to their cultural life".[193]

The Committee's references to natural resources in its general comments therefore largely relate to access to natural resources for the exercise of Covenant rights, and the impact on ESCRs of natural resource exploitation. With the exception of General Comment 15, examined below, there is little guidance from the Committee on how States Parties should manage, protect or sustainably use the natural resources that are fundamental to the enjoyment of many rights in the Covenant.

General Comment 15 refers to water as a "limited natural resource"[194] and requires States Parties to "ensure that natural water resources are protected from contamination by harmful substances and pathogenic microbes".[195] The general comment also requires States Parties to prioritise water needs related to core obligations including those related to starvation and disease,[196] and it includes a clear recognition of the vital role of water resources for the realisation of other ESCRs including the rights to food, health, livelihoods and culture.[197] What makes this general comment significant is that it not only recognises the importance of access to this natural resource for the realisation of ESCRs, but also demonstrates that the protection of the resource is essential for the continued realisation of the right to water. Of course, the more detailed discussion of water as a natural resource in this case can be attributed to the treatment of access to water as a right in and of itself.[198]

As noted above, the Committee's general comments and concluding observations provide little guidance on appropriate regulation and protection of natural resources. It is

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[192] CESCR *General Comment No 21* para 36.
[193] CESCR *General Comment No 21* para 49(d).
[194] CESCR *General Comment No 15* para 1.
[195] Para 8.
[196] Para 6.
[197] Para 6.
[198] While it does not appear as an explicit right in the Covenant itself, the Committee states that the right to water is derived from the interpretation of articles 11 and 12 of the Covenant. See CESCR *General Comment No 15* para 3.

clear, however, that the Committee recognises the significant role of natural resources in the realisation of certain ESCRs. A single, specific circumscribed approach to all natural resources would be ill-advised given the vast distinctions between different types of natural resources and the range of approaches that may be needed to ensure they are managed and used effectively and sustainably. However, the broad principles of IEL could assist in steering decision-making related to natural resources and the environment in so far as the latter are required for the realisation of ESCRs.[199] These flexible principles do not prescribe specific action to be taken and are therefore well-suited to the spectrum of Covenant rights and natural resources. The relevance of these principles for the interpretation of "resources" in article 2(1) is examined below.

5 3 3 Resources and principles of IEL

This section discusses the environmental dimensions of resources under article 2(1) with reference to the principles of IEL outlined in Chapter 4. Integrating environmental considerations within the definition of resources under article 2(1) is required by the principle of integration. In accordance with the rules of interpretation described in Chapter 3, environmental considerations must only be integrated into article 2(1) to the extent that such integration is consistent with the object and purpose of the Covenant. In order to ensure the appropriate use of natural resources towards the realisation of ESCRs and the protection of the environment on which ESCRs depend, States Parties will need to dedicate resources for such environmental protection. This is illustrated in the examples below.

Appropriate environmental management is necessary for ensuring the environmental conditions required for the promotion and protection of ESCRs. Such environmental management requires financial, administrative and organisational resources. These resources are also necessary for the development and implementation of policies and plans for environmental protection. In relation to the right water General Comment 15 requires States Parties to ensure that the relevant agencies responsible for implementation of the right have the necessary resources to maintain and extend water services and facilities.[200] This obligation should be extended to include those agencies responsible for the protection and management of water resources and related environmental protection. Well-resourced agencies for water supply would be meaningless without also providing the necessary organisational and administrative resources to those responsible for managing and

[199] The principles of IEL are examined in Chapter 4.
[200] CESCR *General Comment No 15* para 51.

protecting the lakes, rivers and wetlands that serve as the vital source of the water itself. In its concluding observations on Kazakhstan the Committee has expressed concern regarding regional environmental hazards and pollution and called on the State Party to "strengthen its efforts to address environmental issues" and to "allocate more resources in this regard".[201] It is also significant that in General Comment 24 the Committee noted that States Parties should make use of environmental protection agencies in the context of corporate accountability for harm to ESCRs.[202]

The necessary regulation and enforcement of environmental laws and prosecution of environmental crimes also requires organisational and administrative resources. These are vital to ensure that the state or its population does not bear the cost of environmental degradation caused by private parties. States Parties must, for example, have mechanisms for holding private parties accountable according to the polluter pays principle, to ensure that harm to ESCRs as a result of environmental degradation does not result in undue costs for the state.[203] Compensation for damage to ESCRs as well as related remediation of the environment should be provided for through private resources by imposing costs on those who are responsible and have benefitted from the environmental harm.[204]

Human resources are an important element in ensuring proper environmental management and protection. The state must employ or consult people with the necessary expertise in order to ensure that decisions made in relation to, for example, the allocation of quotas for large and small-scale fishers, appropriately consider the relevant economic, social and environmental factors. In this regard, scientific resources in the form of experts, research and appropriate facilities are important in ensuring that States Parties' policies and plans are appropriately informed by the applicable scientific knowledge. It is important, for example, to follow scientifically sound approaches to food production and water quality, and to accurately assess environmental impacts and risks as well as provide appropriate remediation or mitigation where needed. Physical resources such as equipment and technological devices are also vital in certain contexts, for example where the monitoring of air quality and atmospheric emissions is concerned. Scientific research may also have

[201] CESCR *Concluding Observations, Kazakhstan* (7 June 2010) E/C12/KAZ/CO/1 para 35. In this instance the Committee was concerned about the negative impact on the enjoyment of the right to health.
[202] CESCR *General Comment 24* para 54.
[203] See Chapter 4, 4 3 3 on the polluter pays principle.
[204] See Chapter 4, 4 3 3. See also P Dupuy & JE Viñuales *International Environmental Law* (2018) 81-82.

particular relevance for developing innovative solutions to the evolving challenges that climate change and environmental degradation will pose to ESCRs.[205]

In relation to international resources, it has already been noted that international technical assistance and cooperation form part of a State Party's available resources.[206] In addition to this, legal mechanisms in the IEL regime could be seen as resources available to States Parties and relevant to the environmental dimensions of their obligations under the Covenant. The Committee's concluding observations have already called upon State Parties to comply with the UN Framework Convention on Climate Change ("UNFCCC").[207] The climate change regime should be understood as a resource available to States Parties seeking to mitigate or adapt to climate change. Mechanisms such as the UNFCCC's Clean Development Mechanism or Reducing Emissions from Deforestation and Forest Degradation ("REDD") Programme are international resources that will, in certain circumstances, have relevance for the realisation of ESCRs.[208] Financial international resources related to climate finance, such as the Green Climate Fund,[209] are also integral in the context of climate change mitigation and adaptation.[210] Of course, any such mechanisms must always be implemented in accordance with the Covenant and with respect for the human rights of local populations. These international mechanisms can be leveraged for the protection of ESCRs from environmental degradation and are therefore important resources available to States Parties, particularly in light of the obligation of international assistance and cooperation.

Where international assistance or cooperation is provided, the nature of these international resources should protect the environment for the realisation of ESCRs. In other words, where a developing state is offered international assistance or cooperation with

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[205] See CESCR *General Comment No 25* para 80 in relation to the obligation to share scientific progress with the international community.
[206] See 5 3 1 above.
[207] United Nations Framework Convention on Climate Change (adopted 9 May 1992, entered into force 21 March 1994) 1771 UNTS 107. See, for example, CESCR *Concluding Observations, Ukraine* (4 January 2008) E/C12/UKR/CO/5 para 4; CESCR *Concluding Observations, Cambodia* (12 June 2009) E/C12/KHM/CO/1 para 7. See also Chapter 2, 2 3 4.
[208] See CESCR *Cambodia* (2009) para 7.
[209] On the establishment of the Green Climate Fund, see UNFCCC *Report of the Conference of the Parties on its Sixteenth Session, held in Cancun from 29 November to 10 December 2010 - Addendum Part Two: Action taken by the Conference of the Parties at its Sixteenth Session* (15 March 2011) FCCC/CP/2010/7/Add1 para 102.
[210] UNHRC *Report of the Special Rapporteur on Extreme Poverty and Human Rights: Climate Change and Poverty* (17 July 2019) A/HRC/41/39 para 51-52. See, for example, CESCR *Concluding Observations, Denmark* (12 November 2019) E/C12/DNK/CO/6 para 14-15 where the Committee recommended that the State Party "ensure that its contribution to the Green Climate Fund is over and above the current level of official development assistance and is not to the detriment of development assistance in other areas". See also CESCR *Climate Change and the International Covenant on Economic, Social and Cultural Rights* (31 October 2018) E/C12/2018/1 para 7.

conditions that pose a threat to the environment or depend on unsustainable use of natural resources required for the realisation of ESCRs, the receiving state should refuse such international resources. A right of refusal in this context would be consistent with the principle of sovereignty and the right of self-determination.[211] Similarly, States Parties should not offer international assistance or cooperation that is linked to conditions that will result in significant harm to the environment on which ESCRs depend.

In relation to transboundary and global environmental concerns, international resources have a significant role to play. In this context it is helpful to consider the role of the principle of CBDR.[212] Levels of resources required in terms of international assistance and cooperation should be understood in accordance with the principle of CBDR, particularly in relation to climate change. Where climate change impacts result in harm to ESCRs in a developing state, that state should be able to rely on the international assistance and cooperation of developed states. In particular, a greater degree of assistance and cooperation should be expected of States Parties with more responsibility for GHG emissions, for example, those already identified as Annex I parties under the UNFCCC.[213] Similarly, where a State Party is responsible for, or has contributed to, transboundary environmental harm which impacts on ESCRs, the State Party seeking to remedy the harm and protect ESCRs in its territory should seek assistance from the responsible state.[214] This obligation under the Covenant should apply in addition to the remedies under IEL that are available to states in such circumstances. It is proposed that in addition to these remedies, the level of international assistance and cooperation expected by the Committee from States Parties that bear some responsibility should be greater than the standard expected of other

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[211] See 5 2 above. See also footnote 56 at 5 2 2 above in relation to prior informed consent under IEL and the example of a state's right to refuse transboundary hazardous waste from another state. See also CESCR *Public debt, austerity measures and the International Covenant on Economic, Social and Cultural Rights* (22 July 2016) E/C12/2016/1 para 4 where, in relation loans, the Committee notes that the borrowing State is responsible for ensuring that conditions attached to the loan "do not unreasonably reduce its ability to respect, protect and fulfil the Covenant rights".

[212] See Chapter 4, 4 3 4. CBDR is sometimes also referred to as common but differentiated responsibilities and respective capabilities.

[213] See Chapter 4, 4 3 4 as well as United Nations Framework Convention on Climate Change (adopted 9 May 1992, entered into force 21 March 1994) 1771 UNTS 107. The category of Annex I parties was, however, not carried over to the Paris Agreement. See also De Schutter "Public Budget Analysis" in *The Future of ESR* 585 where it is noted that the rise of the principle of common but differentiated responsibilities "confirms that international law is moving towards the recognition of differentiated duties, depending on the capacity and resources of each State".

[214] On the obligation on States Parties to seek international assistance see, for example, CESCR *General Comment No 4* para 10; CESCR *General Comment No 5: Persons with Disabilities* (9 December 1994) E/1995/22 para 13; CESCR *General Comment No 6: The Economic, Social and Cultural Rights of Older Persons* (8 December 1995) E/1996/22 para 18. See also Sepúlveda *Nature of Obligations under the ICESCR* 376; "Maastricht Principles on ETOs" (2011) *Netherlands Quarterly of HR* para 34.

States Parties to the Covenant.[215] Precisely how such responsibility could be allocated and prioritised is an important area for future research.

In addition to reactionary assistance and cooperation where harm has occurred, it is particularly important in relation to climate change and its impacts that resources of international assistance and cooperation are provided for the prevention and mitigation of impacts as well as for climate change adaptation measures. This is especially relevant for small island developing states in dire need of assistance and cooperation from developed states in mitigating climate change impacts and in ensuring they are able to adapt optimally in order to limit impacts on ESCRs and other human rights.[216]

Turning to other principles of IEL and the guidance they provide, limits to the use of natural resources are supported by the principle of sustainable use, the precautionary principle, the principle of prevention and the no-harm principle. Natural resource use requires limitations according to sustainable use in order to ensure the long-term preservation and use of natural resources. Sustainable use is recognised as a legitimate constraint on state sovereignty for the purposes of long-term sustainability of the relevant resource.[217] The depletion of a resource for the purpose of fulfilling ESCRs in the short term is likely to have more severe consequences for those same rights in the long term, and is likely to impact a greater number of people. A limited, although detrimental, impact on the rights and freedoms of fishers catching marine living resources, for example, should be understood as preferable to a complete depletion of those resources which would impair the ability of all fishers, including future generations, to access resources necessary for their livelihoods as well as for access to food for the broader population. An interpretation of the Covenant that includes natural resources in the scope of article 2(1) must require States Parties to use such resources in accordance with the principle of sustainable use if the Covenant is to be effective in protecting ESCRs.[218]

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[215] It is significant to note that the Committee does emphasise the obligation of international assistance and cooperation for climate change mitigation and adaptation more often when dealing with developing states. See S Duyck & L McKernan *States' Human Rights Obligations in the Context of Climate Change: Synthesis Note on the Concluding Observations and Recommendations on Climate Change adopted by UN Human Rights Treaty Bodies* (2018) 7.

[216] This is what the Committee recommended in the case of Mauritius. See CESCR *Concluding Observations, Mauritius* (5 April 2019) E/C12/MUS/CO/5 para 10. See also CESCR *Concluding Observations, Bangladesh* (18 April 2018) E/C12/BGD/CO/1 para 13-14.

[217] See Redgwell "Sustainable Use of Natural Resources" in *Principles of Environmental Law* 118 where the author notes that "[m]any natural resource development decisions will thus be 'sustainability constrained' owing to other requirements of international law such as carrying out environmental impact assessments or cooperation in the conservation of certain natural resources".

[218] See, for example, CESCR *General Comment No 12* para 25.

The precautionary and preventive principles similarly suggest that limitations on the use of natural resources are necessary in certain circumstances.[219] For example, in the course of exploiting mineral resources a degree of environmental harm is inevitable. In many cases this environmental harm has a severe impact on local communities and indigenous peoples and affects a broad range of rights.[220] Such exploitation should therefore be limited in accordance with the precautionary principle where there is evidence of severe potential impacts on the environment (which would in turn impact on ESCRs). In order for these potential impacts to be identified, the principle of prevention requires undertaking due diligence in relation to human rights and the environmental in the form of environmental impact assessments ("EIAs") and human rights impact assessments ("HRIAs").[221] Such due diligence and impact assessments are also required according to the principle of no-harm in cases where the territory of other states may be impacted by transboundary activities or where activities in one state may cause harm to neighbouring states in the form of, for example, air pollution and water pollution.[222] The Covenant therefore requires States Parties to appropriately exercise the principles of precaution and prevention where activities related to natural resources may cause environmental harm impacting on ESCRs.

In addition to the abovementioned caution that should be exercised prior to the commencement of harmful activities, the precautionary principle also requires precautionary *action* in some cases.[223] Where there is a risk of severe environmental harm that threatens ESCRs, uncertainty regarding the possible impacts must not be used to justify inaction.[224] In the case of climate change, for example, States Parties must not be permitted to rely on scientific uncertainty to justify a failure to devote the necessary resources to prevention, mitigation and adaptation.[225]

The principle of intergenerational equity promotes a forward-looking and long-term approach to the realisation of ESCRs and to the protection of the environment on which these rights depend. In relation to financial or economic resources, Dowell-Jones proposes that article 2(1) implies that objectives set by States Parties must be affordable, and that they "must not detrimentally impact the future ability of the state to implement the

[219] See Chapter 4, 4 3 2 3 and 4 3 2 4 in relation to the principles of prevention and precaution.
[220] See 5 4 2 1 below in relation to the exploitation of natural resources and the impact on human rights.
[221] See Chapter 4, 4 3 2 3 as well as 5 4 2 4 below with regard to due diligence and impact assessments.
[222] See Chapter 4, 4 3 2 2 2 in relation to the no-harm principle.
[223] Precautionary action is discussed at Chapter 4, 4 3 2 4.
[224] See, for example, UNFCCC article 3.
[225] To be clear, scientific uncertainty is not a factor with regard to the *existence* of climate change. However, the precise scope and nature of certain impacts within a State Party's jurisdiction may be contested. In such cases the presence of some uncertainty must not be a bar to preventive and precautionary action.

Covenant".[226] Article 2(1) could also be interpreted to include an understanding of resource use and environmental impact that ensures the future ability of States Parties to realise ESCRs. In order to ensure that the future realisation of ESCRs is not threatened by climate change and environmental degradation, it is therefore important for States Parties to spend resources on environmental protection, the prevention of harm and the mitigation of climate change. The long-term dimension of progressive realisation and the position of future generations is examined in detail in Chapter 6.[227]

In conclusion, the integration of environmental considerations within the concept of "resources" under article 2(1) of the Covenant requires both the responsible and sustainable use of natural resources as well as the dedication of non-natural resources to environmental protection through appropriate environmental regulation, management and protection. Such an approach may initially be counter-intuitive for human rights practitioners seeking to direct funding and resources towards ESCRs. However, these resources are not expended purely for the sake of protecting the environment, they are employed in order to ensure that ESCRs are able to continue being progressively realised over the long term without being unnecessarily impacted by preventable environmental degradation and climate change. In accordance with a teleological interpretation of article 2(1), resources devoted to environmental protection can form part of the "maximum of available resources" used by States Parties, to the extent that such environmental protection is linked to, and supports, the enjoyment of ESCRs. The following section examines the notion of availability in the concept of maximum available resources.

5 4 Availability of resources

5 4 1 Current interpretation

The use of the term "available" in article 2(1) constitutes an implicit recognition that not all state resources can be devoted to the realisation of ESCRs. States Parties are not obliged to use all of their resources in meeting their obligations under the Covenant, but rather to use the maximum of those resources which are available for use. However, precisely which resources should be considered as "available" is not always clear. In relation to the realisation of minimum core obligations, General Comment 3 notes that a State Party is

[226] Dowell-Jones *Contextualising the ICESCR: Assessing the Economic Deficit* 55.
[227] See Chapter 6, 6 3.

required to "demonstrate that every effort has been made to use all resources that are at its disposition".[228]

Shahid notes that resource availability includes the expansion of available resources beyond a "static representation solely of public finance resources or the budget" to encompass "concerted and targeted efforts of all institutions of the State to increase public sector resources for ESC rights and other social development programmes".[229] While a state could use the resources under its control to provide directly for the rights of those within its jurisdiction, the Covenant does not limit a state's responsibility to the resources that are under its exclusive control.[230] Dowell-Jones argues that the interpretation of article 2(1) "must be based upon the premise that there is no presumption that the State itself is obligated to provide these rights directly, but that a wide variety of modalities of protecting socio-economic rights is feasible".[231] This means that, for example, international and private resources can be considered as available resources for the realisation of ESCRs.

As noted above,[232] the Committee has made it clear that international resources should be considered as potential "available resources" for the purposes of article 2(1).[233] In addition to resources available through international assistance and cooperation, private resources must be considered for the realisation of ESCRs. The state is obliged to effectively mobilise resources, including those from private and international sources, in order to provide for ESCRs.[234] De Schutter suggests that resource mobilisation and generation of revenue can occur through a variety of means including trade tariffs, taxation, royalty fees from domestic and foreign companies, exploitation of natural resources, fees for users of public services, international assistance and cooperation, development aid, or international loans.[235] Elson, Balakrishnan and Heintz similarly refer to the creation of fiscal space as the expansion of public expenditure on programmes supporting human well-being or economic development. They list the following means identified by economists to create fiscal space:

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[228] CESCR *General Comment No 3* para 10.
[229] A Shahid *For Want of Resources: Reimagining the State's Obligation to Use 'Maximum Available Resources' for the Progressive Realisation of Economic, Social and Cultural Rights* DPhil thesis, University of Sydney (2016) 11.
[230] Robertson (1994) *Human Rights Quarterly* 699.
[231] Dowell-Jones *Contextualising the ICESCR: Assessing the Economic Deficit* 51. There are, however, circumstances where the State Party must provide ESCRs directly. See, for example, CESCR *General Comment No 12* para 15.
[232] See section 5 3 1.
[233] See, for example, CESCR *The Obligation to Take Steps to the "Maximum of Available Resources"* para 5.
[234] See, for example, CESCR *Concluding Observations, Estonia* (27 March 2019) E/C12/EST/CO/3 para 9; CESCR *Concluding Observations, Cameroon* (25 March 2019) E/C12/CMR/CO/4 para 14-15. See also Shahid *For Want of Resources* 108-124.
[235] De Schutter "Public Budget Analysis" in *The Future of ESR* 563. See 563-593 for a more detailed discussion of these methods of resource mobilisation.

> "[R]eallocating public spending towards the desired goals and improving its efficiency and effectiveness; increasing tax revenue, through changes to the tax code and improvements in the effectiveness of tax collection; obtaining more official development assistance; and appropriate borrowing from private domestic or international sources".[236]

The Covenant does not prescribe a specific economic or political approach for States Parties, but merely requires a democratic society with respect for human rights.[237] It is therefore necessary to remember that States Parties to the Covenant may have very different approaches to economic policy.[238] However, the Committee recognises that one of the most important mechanisms to mobilise resources for the purposes of the Covenant is through the imposition of taxes.[239]

With regard to taxation, the Committee has shown particular concern for effectively combatting inequality [240] and has regularly promoted progressive tax policies with redistributive capacity.[241] Tax policies should be consistent with the principles of non-discrimination and equality.[242] For example, the Committee expressed concern where an increase in value added tax in South Africa was not assessed for its impact on low-income households and its potential to exacerbate existing inequality.[243] In relation to business activities, General Comment 24 notes that the obligation to fulfil may require "enforcing progressive taxation schemes".[244] De Schutter argues that taxation creates a particular relationship between the state and the taxpayer or citizen as it creates "a strong incentive both for the State to use public revenue for the good of the population, and for the population to control the use of public finance".[245] In his capacity as Special Rapporteur on Extreme Poverty and Human Rights, De Schutter affirms the need for progressive taxation schemes

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[236] Elson, Balakrishnan & Heintz "Public Finance, Maximum Available Resources & HR" in *HR & Public Finance* 17.
[237] See, for example, ICESCR article 1 & 4.
[238] See for example Dowell-Jones *Contextualising the ICESCR: Assessing the Economic Deficit* 49 where the author refers to the example of the "generous levels of state services" in Nordic countries and the fact that "other States parties even within the same regional grouping may not favour the high taxation and high levels of State involvement in economic life".
[239] Elson, Balakrishnan & Heintz "Public Finance, Maximum Available Resources & HR" in *HR & Public Finance* 26; Robertson (1994) *Human Rights Quarterly* 699.
[240] See, for example, CESCR *South Africa* (2018) para 16; CESCR *Cameroon* (2019) para 14; CESCR *Concluding Observations, Senegal* (13 November 2019) E/C12/SEN/CO/3 para 10.
[241] See, for example, CESCR *Concluding Observations, Spain* (25 April 2018) E/C12/ESP/CO/6 para 16; CESCR *Concluding Observations, Argentina* (1 November 2018) E/C12/ARG/CO/4 para 22; CESCR *Concluding Observations, Ecuador* (14 November 2019) E/C12/ECU/CO/4 para 21-22. See also Elson, Elson, Balakrishnan & Heintz "Public Finance, Maximum Available Resources & HR" in *HR & Public Finance* 16.
[242] Elson, Balakrishnan & Heintz "Public Finance, Maximum Available Resources & HR" in *HR & Public Finance* 28. See also ICESCR article 2(2) & 3.
[243] CESCR *South Africa* (2018) para 16-17. See also CESCR *Concluding Observations, United Kingdom of Great Britain and Northern Ireland* (14 July 2016) E/C12/GBR/CO/6 para 16; De Schutter "Public Budget Analysis" in *The Future of ESR* 574 & 576-577.
[244] CESCR *General Comment No 24* para 23.
[245] De Schutter "Public Budget Analysis" in *The Future of ESR* 592.

to recover from the current economic crisis and to "eradicat[e] poverty within planetary boundaries".[246] Taxation is a means of mobilising private resources for the advancement of Covenant rights,[247] particularly where tax on wealthier individuals can be redistributed by the state through programmes which promote ESCRs.[248] Uprimny, Hernández and Araújo point out that the Committee's recent treatment of maximum available resources indicates that where States Parties have high levels of economic inequality, redistributive policies for the realisation of ESCRs may be warranted.[249]

It is also important to note that States Parties must ensure that their policies do not inhibit the freedom of individuals to use private resources to meet their own needs. In a 1992 report the then Special Rapporteur on the Realisation of Economic, Social and Cultural Rights, Danilo Türk, noted the limitations in the capacity of governments to fulfil ESCRs at every level, and emphasised the importance of allowing individuals to flourish by creating space which can "lead to improvements in the livelihood of citizens by simply allowing people to create their own solutions to their own problems".[250] In this regard a state's responsibilities would include negative obligations not to intervene where individuals are fulfilling their own needs through, for example, work in the informal sector or community initiatives.[251] This approach echoes the requirement in article 1(2) in relation to the right of self-determination which asserts that "[i]n no case may a people be deprived of its own means of subsistence".[252]

Finally, in relation to natural resources, two preliminary points must be made. Firstly, the emphasis in relation to natural resource availability and mobilisation to date has been on the ability of natural resource exploitation to provide revenue for the realisation of ESCRs, and not on the ability of those resources to directly contribute to the enjoyment of the rights in

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[246] UNGA *Interim Report of the Special Rapporteur on Extreme Poverty and Human Rights, Olivier De Schutter: The "Just Transition" in the Economic Recovery: Eradicating Poverty within Planetary Boundaries* (7 October 2020) A/75/181/Rev1 para 57. See para 54 & 56 in relation to progressive taxation.
[247] Uprimny, Hernández & Araújo "Bridging the Gap" in *The Future of ESR* 642; Robertson (1994) *Human Rights Quarterly* 699.
[248] Uprimny, Hernández & Araújo "Bridging the Gap" in *The Future of ESR* 642.
[249] Uprimny, Hernández & Araújo "Bridging the Gap" in *The Future of ESR* 637.
[250] UN Economic and Social Council *Report of the UN Special Rapporteur on the Realization of Economic, Social and Cultural Rights* (3 July 1992) E/CN4/Sub2/1992/16 para 192. See for example para 191 where the Special Rapporteur notes that, in relation to the right to housing and at the time of the report, it was reported that 60-90% of all housing in urban areas was constructed by individuals "without assistance from either the State or the market". See also Robertson (1994) *Human Rights Quarterly* 698-700.
[251] UN Economic and Social Council *Report of the UN Special Rapporteur on the Realization of Economic, Social and Cultural Rights* (3 July 1992) E/CN4/Sub2/1992/16 para 192-193. The Special Rapporteur notes that "[c]reating space means that the issue of official 'legality' should not be employed by the State to deny citizens the ability to fulfilling there (sic) own needs when the State is unwilling or incapable of doing so".
[252] See section 5 2 2 above in relation to self-determination.

the Covenant.[253] In the case of Cameroon, for example, the Committee has recommended that the State Party increase revenue by raising fees for foreign exploitation of natural resources.[254] Secondly, commentators have begun to recognise that the sustainability of natural resource use (particularly where non-renewable resources are concerned) may impose limits on our understanding of the 'availability' of natural resources for the realisation of ESCRs.[255] The exploitation of natural resources is a significant source of revenue for many States Parties, but it is also often the source of significant harm to the environment and to ESCRs. The exploitation of natural resources is therefore discussed in more detail below. The section that follows will examine the human rights impacts of natural resource exploitation; the exploitation of natural resources for financial revenue by States Parties and by non-state actors; and the role of EIAs and HRIAs in such activities.

5 4 2 Exploitation of natural resources

5 4 2 1 The human rights impacts of natural resource exploitation

The scope and severity of the human rights impacts of natural resource exploitation is evident. For example, the former Special Rapporteur on Extreme Poverty and Human Rights, Magdalena Sepúlveda Carmona has said the following regarding the sustainable use of natural resources and respect for human rights:

> "Natural resources can be a vital source of revenue that the State can use to comply with its human rights obligations. The financial and social benefits of natural resource exploitation are, however, increasingly bypassing people in producing countries. In most countries, extractive industries generate few jobs directly and have only weak links to local markets. Far from bringing benefits, the exploitation of natural resources has been frequently linked to human rights abuse and encroachment on lands and livelihoods of communities, mass evictions, pollution and environmental degradation, which may result in violations of rights to health, food, housing and water. The right of people to participate in decisions regarding natural resources is often violated, especially where the land, territory and resources of indigenous peoples is concerned".[256]

On various occasions the Committee has recognised the risk of activities related to natural resource exploitation and their impacts on ESCRs and the environment.[257] In its concluding

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[253] See, for example, De Schutter "Public Budget Analysis" in *The Future of ESR* 564-570 & 592-593.
[254] CESCR *Cameroon* (2019) para 15. See also CESCR *Concluding Observations, Sudan* (27 October 2015) E/C12/SDN/CO/2 para 15-16.
[255] Uprimny, Hernández & Araújo "Bridging the Gap" in *The Future of ESR* 653. See also footnote 85 where the authors note that "some economic and material resources, that could be used in the past, are no longer 'available' as they are not sustainable because of their negative impact on climate change". See also Shahid *For Want of Resources* 11.
[256] UNHRC *Report of the Special Rapporteur on Extreme Poverty and Human Rights, Magdalena Sepúlveda Carmona* (22 May 2014) A/HRC/26/28 para 70.
[257] See OHCHR *Mapping Human Rights Obligations relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment: Individual Report on the International Covenant on Economic, Social and Cultural Rights* (December 2013) para 14. This report was prepared in terms of the special procedures of the UN

observations the Committee has expressed concern regarding the pollution and damage to homes resulting from gas extraction and oil refinery activities;[258] as well as damage to the environment and indigenous people's livelihoods as a result of extractive activities.[259] In its 2020 concluding observations in respect of Norway, the Committee expressed concern regarding licences issued by the State Party for "the exploration and exploitation of petroleum and natural gas reserves […] and their impact on global warming".[260] The Committee recommended that the State Party reconsider its position and that it "take its human rights obligations as a primary consideration into its natural resource exploitation and export policies".[261] The Committee's concluding observations also express concern regarding a "lack of information on measures to ensure the right to water" in relation to mining activities;[262] and the negative impact of extractive industries on the right to health,[263] the right to water,[264] as well as on "global warming and on the enjoyment of economic and social rights by the world's population and future generations".[265] The impacts of natural resource exploitation extend beyond the immediate impacts felt by local communities, and include impacts of environmental harm over the long term. The immediate impact on local communities must therefore be considered along with the long-term impacts of, for example, water and air pollution or soil degradation as these may lead to irreversible environmental damage and more far-reaching consequences for ESCRs.

The Committee has also highlighted the relationship between the rights of indigenous peoples and activities related to the exploitation of natural resources.[266] Importantly, General Comment 14 on the right to health the Committee affirms that:

> "[D]evelopment-related activities that lead to the displacement of indigenous peoples against their will from their traditional territories and environment, denying them their sources of

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Human Rights Council for the Independent expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy, and sustainable environment.

[258] CESCR *Concluding Observations, The Netherlands* (23 June 2017) E/C12/NLD/CO/6 para 11.

[259] CESCR *Netherlands* (2017) para 11. On damage to the environment, see also CESCR *Mali* (2018) para 43.

[260] CESCR *Concluding Observations, Norway* (2 April 2020) E/C12/NOR/CO/6 para 10.

[261] CESCR *Norway* (2020) para 11.

[262] CESCR *Ecuador* (2019) para 53.

[263] CESCR *Concluding Observations, Mauritania* (10 December 2012) E/C12/MRT/CO/1 para 8; CESCR *Peru* (2012) para 22; CESCR *Mali* (2018) para 43.

[264] CESCR *Peru* (2012) para 22.

[265] CESCR *Ecuador* (2019) para 11.

[266] See, for example, CESCR *General Comment No 14* para 27; CESCR *Concluding Observations, Cameroon* (23 January 2012) E/C12/CMR/CO/2-3 para 33; CESCR *Concluding Observations, Finland* (16 January 2008) E/C12/FIN/CO/5 para 20; CESCR *Concluding Observations, Finland* (17 December 2014) E/C12/FIN/CO/6 para 9; CESCR *Concluding Observations, Sweden* (14 July 2016) E/C12/SWE/CO/6 para 13-14; CESCR *Ecuador* (2019) para 15-16; CESCR *Cameroon* (2019) para 16-17; CESCR *Netherlands* (2017) para 11.

> nutrition and breaking their symbiotic relationship with their lands, has a deleterious effect on their health".[267]

This of course applies to other forms of development and not only the exploitation of natural resources, although the latter tends to have a greater environmental impact. The Committee's concern for indigenous peoples is echoed in its concluding observations. In the case of Cameroon, for example, the Committee noted its concern regarding the removal of indigenous peoples from their ancestral lands which were offered to third parties for logging activities.[268] The Committee recommended "that the State party take effective measures to protect the right of each group of indigenous people to its ancestral lands and the natural resources found there".[269] Seven years later, the Committee's concluding observations in relation to Cameroon reiterated this concern, noting that some activities related to the exploitation of natural resources have negative impacts on "the traditional lifestyles of the relevant population groups, including indigenous peoples, and on their access to land, an adequate food supply and an adequate standard of living".[270] The Committee has expressed similar concerns about the impact of extractive activities on the ancestral lands and traditional ways of living of the Sami people in its concluding observations in respect of Finland and Sweden.[271] These impacts on indigenous peoples are not restricted to the boundaries of the State Party's territory, as is evident in the Committee's concluding observations regarding the Netherlands where it expressed concern about "reports of serious damage to the environment and to indigenous peoples livelihoods" in Peru, as a result of the conduct of a company domiciled in the Netherlands.[272]

The relationship between extractive industries and indigenous peoples is dealt with in more detail in the work of the former Special Rapporteur on the Rights of Indigenous Peoples, James Anaya.[273] The Special Rapporteur's 2013 report on extractive industries and indigenous peoples notes the following:

> "The worldwide drive to extract and develop minerals and fossil fuels […] coupled with the fact that much of what remains of these natural resources is situated on the lands of indigenous peoples, results in increasing and ever more widespread effects on indigenous peoples' lives".[274]

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[267] CESCR *General Comment No 14* para 27.
[268] CESCR *Cameroon* (2012) para 33.
[269] CESCR *Cameroon* (2012) para 33.
[270] CESCR *Cameroon* (2019) para 16.
[271] See CESCR *Finland* (2008) para 20; CESCR *Finland* (2014) para 9; CESCR *Sweden* (2016) para 13-14.
[272] CESCR *Netherlands* (2017) para 11.
[273] See UNHRC *Report of the Special Rapporteur on the Rights of Indigenous Peoples, James Anaya: Extractive Industries and Indigenous Peoples* (1 July 2013) A/HRC/24/41.
[274] UNHRC *Extractive Industries and Indigenous Peoples* (2013) A/HRC/24/41 para 1.

The work of the Special Rapporteur thus echoes the concerns expressed by the Committee regarding threats to the rights of indigenous peoples as a result of the exploitation of natural resources.[275]

Of course, natural resource exploitation is not necessarily problematic. These activities form an integral part of development and can generate significant revenue for ESCRs while also providing for the livelihoods of many individuals and communities. In the case of indigenous peoples, it has been demonstrated that the extraction of natural resources can, for example, enhance the enjoyment of the right of self-determination for such peoples.[276] What causes harm is unsustainable over-exploitation of resources without consideration for the impacts thereof, a lack of consultation with local communities or consideration of indigenous practices, as well as poor management and regulation of these activities. Given the significant potential for severe environmental and human rights impacts associated with such activities, it is important that the risks are carefully assessed and that activities are regulated, managed, and monitored so as to avoid harmful consequences and to ensure the greatest possible protection of ESCRs.

5 4 2 2 The exploitation of natural resources for financial revenue

As noted above, the exploitation of natural resources is an important means of mobilising resources for the realisation of ESCRs.[277] The Committee has required that the exploitation of natural resources result in benefits for the population, criticising States Parties that have generated significant revenue from the exploitation of natural resources but have failed to translate these gains into ESCRs for their people.[278] In its concluding observations with respect to Solomon Islands, the Committee noted, for example, that "the major share of the country's natural resources is exploited by foreign companies which pay low taxes, if any, to the Government and, by taking most of the profits abroad, leave only few benefits to Solomon Islands".[279] This echoes the aspects of state sovereignty and self-determination discussed above that require benefits to accrue to the people themselves and not to the

[275] See, for example, CESCR *Concluding Observations, Cameroon* (23 January 2012) E/C12/CMR/CO/2-3 para 33; CESCR *Concluding Observations, Finland* (16 January 2008) E/C12/FIN/CO/5 para 20; CESCR *Concluding Observations, Finland* (17 December 2014) E/C12/FIN/CO/6 para 9; CESCR *Concluding Observations, Sweden* (14 July 2016) E/C12/SWE/CO/6 para 13-14; CESCR *Ecuador* (2019) para 15-16; CESCR *Cameroon* (2019) para 16-17; CESCR *Netherlands* (2017) para 11.
[276] UNHRC *Extractive Industries and Indigenous Peoples* (2013) A/HRC/24/41 para 9-11. This enhancement of self-determination and related rights occurs where indigenous peoples are responsible for the initiation and control of such resource extraction, rather than it being imposed on their lands by external actors.
[277] See section 5 4 1. See also De Schutter "Public Budget Analysis" in *The Future of ESR* 563.
[278] See CESCR *Central African Republic* (2018) para 16; CESCR *Mali* (2018) para 12-13; CESCR *Congo* (2013) para 12; CESCR *Chad* (2009) para 23.
[279] CESCR *Concluding Observations, Solomon Islands* (14 May 1999) E/C12/1/Add33 para 10.

state. It is important to note that, in the case of indigenous peoples, FPIC must be obtained for such activities.[280] De Schutter notes that "[t]he revenues gained from the agreements concluded between host States and investors for the exploitation of natural resources should […] serve to fulfil the rights of the population".[281] Effective redistribution of revenue from the exploitation of natural resources can be achieved through, for example, setting up funds for the purposes of health, education and development projects as well as compensation funds for local communities, and putting appropriate monitoring mechanisms and procedural safeguards in place to ensure that the local population receives such benefits.[282] The Committee's concluding observations have also recommended benefits and compensation for local communities directly impacted by natural resource exploitation.[283]

Benefits from natural resource exploitation should also be equitably distributed and should be undertaken with respect for the human rights of those directly affected. Perelman points out that while many Latin American states have financed land reforms and social welfare in part "by revenue flows generated by the adherence of these governments to natural resources-led development models", this has been done at expense of certain groups.[284] De Schutter similarly notes the dangers of unequal enjoyment of wealth from mineral resource exploitation, explaining that the wealth is often controlled by a small number of individuals and "[t]he capture of benefits can therefore be highly unequal, unless affirmative measures are taken to ensure that they will be fairly distributed across a large number of people".[285]

Although the exploitation of natural resources can provide much needed revenue for the promotion and realisation of ESCRs, it is sometimes at the expense of human rights and the environment itself. This is often the case in relation to local communities directly impacted by the activities,[286] particularly where extractive industries and indigenous peoples are concerned. As the former Special Rapporteur on the Rights of Indigenous Peoples, James

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[280] See UNGA *United Nations Declaration on the Rights of Indigenous Peoples* (2 October 2007) A/RES/61/295. See also UNHRC *Extractive Industries and Indigenous Peoples* (2013) A/HRC/24/41 para 26-36; UNHRC *Report of the Special Rapporteur on the Rights of Indigenous Peoples, James Anaya* (6 July 2012) A/HRC/21/47 para 79-80. The obligation of FPIC is discussed at Chapter 2, 2 2 2.
[281] De Schutter "Public Budget Analysis" in *The Future of ESR* 565.
[282] De Schutter "Public Budget Analysis" in *The Future of ESR* 568-569.
[283] CESCR *Cameroon* (2019) para 16-18; CESCR *Mali* (2018) para 43-44.
[284] J Perelman "Human Rights, Investment and the Rights-ification of Development: The Practice of 'Human Rights Impacts Assessments' in Large-Scale Foreign Investments in Natural Resources" in K Young (ed) *The Future of Economic and Social Rights* (2019) 434 458.
[285] De Schutter "Public Budget Analysis" in *The Future of ESR* 566. De Schutter also notes that there is a great temptation "for those in power both to exploit those [mineral] resources to create as much wealth as possible within the shortest possible time […] and to sell off the right to exploit resources to the highest bidder […], but sometimes with scant attention being paid to the long-term impacts or to the interests of the local communities".
[286] Perelman "HR, Investment & Rights-ification of Development" in *The Future of ESR* 458-459.

Anaya observes, "indigenous peoples around the world have suffered negative, even devastating, consequences from extractive industries".[287] In addition to the direct impact of the exploitation of natural resources on surrounding communities, the impacts on the environment and natural resources must also be considered where these are necessary for the realisation of human rights. For example, a mining development project should be assessed for its cumulative impact on water resources as pollution from acid mine drainage could have significant indirect and long-term impacts on the rights to water, health, and food, due to the integral role of water resources in fulfilling these rights.

Any effective mobilisation of financial resources by means of natural resource exploitation must therefore include a duty to prevent harm to human rights and the environment of the population.[288] A State Party's responsibility to use the maximum of available resources should include the protection of available natural resources from degradation in the name of economic revenue, where those natural resources are essential for the realisation of ESCRs. This is essential for the effectiveness of the interpretation of maximum available resources under article 2(1) of the Covenant.[289] Covenant rights cannot be realised without the preservation of the natural resources on which they depend. An important mechanism to ensure the protection of the environment and human rights in this context is the use of environmental and human rights impact assessments.[290] Before turning to these impact assessments, the section below addresses the exploitation of natural resources by private actors.

5 4 2 3 Exploitation of natural resources by private actors

A State Party is often involved in the exploitation of natural resources through the relevant licensing and authorisation processes, and occasionally through direct exploitation of natural resources by the state itself. However, most instances of natural resource exploitation are pursued by private parties, often foreign or transnational corporations. It has also been observed that a significant portion of human rights violations by corporations relate to the impacts of environmental harm.[291] The role of these private actors is therefore essential to consider in the management and protection of natural resources as well as the protection of

[287] UNHRC *Extractive Industries and Indigenous Peoples* (2013) A/HRC/24/41 para 1.
[288] This duty should be included within the scope of the Covenant and would apply in addition to any environmental obligations imposed on the relevant state in accordance with IEL.
[289] See Chapter 3, 3 3 3 2 1 on the interpretive principle of effectiveness.
[290] See, for example, CESCR *Concluding Observations, Kazakhstan* (29 March 2019) E/C12/KAZ/CO/2 para 16-18 where the Committee recommends human rights and environmental impact assessments prior to "entering into investment and trade agreements or licencing investments". Impact assessments are discussed in more detail at 5 4 2 4 below.
[291] De Schutter *International HR Law* 550.

human rights from the impacts of such activities.[292] It is therefore not surprising that the Committee's references to natural resource exploitation have largely centred on the activities of such private actors.

The Committee's position on the obligations of States Parties in relation to business activities is set out in General Comment 24. The Committee states that States Parties may be held responsible for the conduct of business entities in the following circumstances:

> "(a) if the entity concerned is in fact acting on that State party's instructions or is under its control or direction in carrying out the particular conduct at issue, as may be the case in the context of public contracts; (b) when a business entity is empowered under the State party's legislation to exercise elements of governmental authority or if the circumstances call for such exercise of governmental functions in the absence or default of the official authorities; or (c) if and to the extent that the State party acknowledges and adopts the conduct as its own".[293]

In addition to this, States Parties have an extraterritorial obligation to protect, requiring them to "take steps to prevent and redress infringements of Covenant rights that occur outside their territories due to the activities of business entities over which they can exercise control".[294]

General Comment 24 makes specific reference to the exploitation of natural resources by businesses. The Committee notes that the granting of exploration or exploitation permits without consideration of the potential adverse impacts on ESCRs would constitute a violation of the duty to protect Covenant rights.[295] In respect of extraterritorial obligations, the Committee notes that a State Party could be held responsible where a violation of Covenant rights is reasonably foreseeable, noting that "considering the well-documented risks associated with the extractive industry, particular due diligence is required with respect to mining-related and oil development projects".[296] The Committee thus recognises that the exploitation of natural resources by business entities, and the resultant impacts thereof, is potentially harmful to the enjoyment of ESCRs and due diligence must be exercised with respect to potential impacts on human rights. The general comment also highlights the vulnerable position of indigenous peoples, requiring States Parties to ensure that private actors "consult and cooperate in good faith with indigenous peoples" in order to obtain their FPIC, and that impacts on indigenous peoples are included in HRIAs.[297] In this context the

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[292] See, for example, D Weissbrodt "Roles and Responsibilities of Non-State Actors" in D Shelton (ed) *The Oxford Handbook of International Human Rights Law* (2013) 719 726-727.
[293] CESCR *General Comment No 24* para 11.
[294] Para 30. See para 30-35 on the extraterritorial obligation to protect. See also "Maastricht Principles on ETOs" (2011) *Netherlands Quarterly of HR* para 23-25.
[295] CESCR *General Comment No 24* para 18.
[296] Para 32.
[297] Para 17. See also para 8, 12, 46 & 52.

Committee also notes that companies must "establish mechanisms that ensure that indigenous peoples share in the benefits generated by the activities developed on their traditional territories".[298]

It is clear from General Comment 24 that the Committee views environmental harm as a threat to ESCRs and includes environmental protection as a dimension of the responsibilities associated with business activities. The Committee includes domestic environmental law as an area of the law applicable to business entities and "designed to protect specific economic, social and cultural rights",[299] and urges States Parties to make use of environmental protection agencies in providing remedies for ESCR violations.[300] The Committee also recommends that public contracts should not be awarded to companies "that have not provided information on the social or environmental impacts of their activities".[301] States Parties must therefore ensure that activities related to natural resource exploitation protect ESCRs through regulation of environmental law, the effective use of environmental protection agencies, and the provision of information on social and environmental impacts.

The Committee has also addressed the responsibilities of private actors in its concluding observations. Since 2017 the Committee has referred to General Comment 24 in a number of concluding observations, reminding States Parties of the duty to ensure that companies perform human rights due diligence in respect of their activities domestically and abroad.[302] This includes ensuring that there is an effective regulatory framework; that impacts on ESCRs are assessed; that where violations occur there is access to remedies for victims; and that liability is imposed on entities responsible for such violations.[303] The Committee has also recommended that States Parties include monitoring mechanisms in their regulation of corporations[304] and that they strengthen legislation and measures to investigate and hold corporations liable for their actions (particularly in relation to activities abroad).[305]

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[298] CESCR *General Comment No 24* para 17.
[299] Para 4.
[300] Para 54.
[301] Para 50.
[302] CESCR *Israel* (2019) para 14-15; CESCR *Cameroon* (2019) para 16-18; CESCR *Spain* (2018) para 8-9; CESCR *Netherlands* (2017) para 11-13; CESCR *Colombia* (2017) para 12-14; CESCR *Republic of Korea* (6 October 2017) E/C12/KOR/CO/4 para 17-19; CESCR *Concluding Observations, Denmark* (12 November 2019) E/C12/DNK/CO/6 para 18-20; CESCR *Kazakhstan* (2019) para 16-18.
[303] CESCR *Spain* (2018) para 8-9; CESCR *Colombia* (2017) para 12-14; CESCR *Republic of Korea* (2017) para 17-19; CESCR *Denmark* (2019) para 18-20; CESCR *Kazakhstan* (2019) para 16-18.
[304] CESCR *Netherlands* (2017) para 11-13.
[305] CESCR *Netherlands* (2017) para 11-13; CESCR *Canada* (2016) para 15-16.

Regarding the obligations of private actors in the context of natural resource exploitation, the Committee's concluding observations are critical of ineffective protection of human rights by States Parties when granting permits for exploitative activities;[306] the relaxation of rules for extractive industries resulting in impacts on ESCRs;[307] and disproportionate and unsustainable use of natural resources by private actors.[308] It is clear that the Committee expects States Parties to regulate the exploitation of natural resources by ensuring the protection of ESCRs;[309] drawing up clear rules and guidelines for assessing the impacts of these activities on ESCRs and the environment,[310] using independent experts for such assessments;[311] and ensuring effective enforcement of these rules and regulations.[312] In some cases this will require drawing up new rules and regulations to respond to new or developing technologies for natural resource extraction. For example, in the case of Argentina the Committee recommended that the State Party establish a regulatory framework to govern hydraulic fracturing, including provision for impact assessments and documentation of potential effects.[313] The Committee has also recommended the consultation of local communities,[314] including indigenous peoples, as well as compensation for damage caused and a share of the profits for these communities from natural resource exploitation.[315] In its concluding observations in relation to Mauritania the Committee has recommended that the State Party ensure that extractive and mining activities, as well as the resources they generate, "bring about tangible benefits to the enjoyment of economic, social and cultural rights by the population".[316]

In response to the impact of mining operations in Mali, the Committee expressed concern regarding the resultant "irreversible damage to the environment and [the infringement of] the

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[306] CESCR *Cameroon* (2019) para 16-18.
[307] CESCR *Ecuador* (2019) para 15-16.
[308] CESCR *Chile* (2015) para 27. In this case the Committee was concerned about excessive water use by the mining industry. See also UNGA *United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas* (21 January 2019) A/RES/73/165 article 21(5) on the prioritisation of human needs with respect to water use.
[309] CESCR *Ecuador* (2019) para 53-54.
[310] CESCR *Cameroon* (2019) para 16-18; CESCR *Argentina* (2018) para 57-58; CESCR *Mali* (2018) para 43-44; CESCR *Canada* (2016) para 54; CESCR *Concluding Observations, Namibia* (23 March 2016) E/C12/NAM/CO/1 para 13; CESCR *Mauritania* (2012) para 8.
[311] CESCR *Peru* (2012) para 22.
[312] CESCR *Cambodia* (2009) para 6; CESCR *Mauritania* (2012) para 8.
[313] CESCR *Argentina* (2018) para 57-58.
[314] See CESCR *Colombia* (2017) para 16 where the Committee recommended that "the State party take the necessary measures to ensure that the outcome of public consultations is given due weight and is taken into account by the competent authorities, and is then applied in collaboration with the affected communities".
[315] CESCR *Cameroon* (2019) para 16-18; CESCR *Mali* (2018) para 43-44.
[316] CESCR *Mauritania* (2012) para 8. In particular, the Committee expressed concern regarding the lack of local employment generated by extractive and mining activities, in addition to their detrimental impacts on the environment and the right to health. In relation to the fair distribution of benefits for the local population, see De Schutter "Public Budget Analysis" in *The Future of ESR* 564-565.

right to health and the right to an adequate standard of living of affected communities".[317] The Committee recommended regulations related to human rights and environmental impact assessments as well as compensation and a share in benefits for affected communities.[318] It is noteworthy that in this case the Committee also recommended that the State Party "[d]emand that mining companies take effective steps to prevent the water and air pollution and soil degradation resulting from their activities" as well as the reclamation of areas damaged by mining activities.[319] This requires not only an assessment of impacts prior to granting authorisations for such activities, but an ongoing duty of care imposed on these industries in relation to environmental protection. This ongoing duty of care should extend to the closure and decommissioning of facilities and any related environmental remediation and rehabilitation. What is clear is that States Parties are responsible for holding private entities to account for the damage they cause as a result of natural resource exploitation, as well as for ongoing regulation of these activities in order to prevent harm to human rights and the environment.

As noted above, a State Party can be held responsible for the conduct of a company domiciled in its jurisdiction and exploiting natural resources elsewhere, in accordance with extraterritorial obligations.[320] In addition to this, the Committee recognises that, particularly due to the nature of environmental harm, the impacts and consequences of extractive activities are not necessarily felt where the activity itself is undertaken. In its concluding observations in relation to Ecuador in 2019 the Committee noted that increased extractive activities would "have a negative impact on global warming and on the enjoyment of economic and social rights by the world's population and future generations" counter to the State Party's commitments in relation to climate change.[321]

The responsibilities of corporate entities in relation to climate change are set out in the Committee's 2018 statement on climate change and the Covenant where the Committee affirms the duties of "State and non-State actors", requiring the protection of human rights "by effectively regulating private actors to ensure that their actions do not worsen climate change".[322] In this context the Committee emphasises that "[c]orporate entities are expected

[317] CESCR *Mali* (2018) para 43.
[318] Para 44.
[319] Para 44. It is unclear what the Committee envisioned in terms of rehabilitation and reclamation given its recognition of the environmental harm as "irreversible".
[320] See CESCR General Comment No 24 para 11 & 25-37. See also, for example, CESCR *Netherlands* (2017) para 11-13.
[321] CESCR *Ecuador* (2019) para 11-12.
[322] CESCR *Climate Change and the International Covenant on Economic, Social and Cultural Rights* (31 October 2018) E/C12/2018/1 para 10.

to respect Covenant rights regardless of whether national laws exist or are fully enforced in practice" and that "[c]ourts and other human rights mechanisms should ensure that business activities are appropriately regulated".[323] These duties therefore apply to the exploitation of natural resources where such activities impact on climate change.

Given the vital role of impact assessments in regulating and monitoring the activities of both state and non-state actors in relation to the exploitation of natural resources, it is necessary to explore these in more detail. The nature and content of such assessments as well as the Committee's references to them are discussed below.

5 4 2 4 Environmental and human rights impact assessments

The assessment of the impacts of activities for the exploitation of natural resources primarily takes the form of an EIA, HRIA, or both such assessments. These impact assessments are central to the exercise of due diligence in the environmental and human rights contexts. They serve to ensure that the possible range of consequences flowing from a particular decision are carefully considered, thereby allowing detrimental impacts to be avoided or mitigated. As there is a broad range of activities that may require an EIA or HRIA, the scope and extent of the impact assessment would need to be determined according to the nature of the proposed activity. It is possible, however, for States Parties to identify certain categories of activities, such as extractive activities, that will always require an EIA and HRIA, or an integrated environmental and human rights impact assessment.

As noted in Chapter 4, international environmental law views EIAs as a procedural duty flowing from the due diligence required by the preventive principle.[324] EIAs require the proponents of a particular project or activity "to identify, assess and evaluate the potential adverse environmental consequences of a proposed activity in a manner that is scientifically rigorous, transparent and participatory".[325] This is most commonly required in the context of specific projects that trigger the need for an EIA, although in some jurisdictions strategic environmental assessments ("SEAs") are undertaken in relation to broader policies, plans and programmes.[326] In the international arena, the duty to conduct EIAs has been largely confined to instances of potential transboundary environmental harm.[327] The specifics of a

[323] CESCR *CC and the ICESCR* para 10.
[324] P Dupuy & JE Viñuales *International Environmental Law* (2018) 69; L Duvic-Paoli "Principle of Prevention" in L Krämer & E Orlando (eds) *Principles of Environmental Law* (2018) 161 168. See Chapter 4, 4 3 2 3.
[325] N Craik "Environmental Impact Assessment" in L Krämer & E Orlando (eds) *Principles of Environmental Law* (2018) 195 195. See also 204 where Craik notes that participation in environmental decision-making "is increasingly being framed in human rights language".
[326] Craik "EIA" in *Principles of Environmental Law* 200.
[327] Dupuy & Viñuales *International Environmental Law* 79.

particular EIA process are not always prescribed in detail as "the content of an EIA will depend on the circumstances of the case and the demands of due diligence".[328] However, EIAs will often include a description of the particular project and the environmental conditions; a description of possible alternatives to the project; and an assessment of the impacts of the project as well as the alternatives, including any cumulative impacts.[329] Where an EIA process has been undertaken the proponent may also be obliged to continue monitoring impacts after completion of the project or while activities are ongoing.[330] In the human rights context, EIAs play a crucial role in ensuring procedural rights in relation to the environment, particularly access to information, consultation and participation.[331] While there is no human right to an EIA itself, Craik argues that it may be "crystallizing" as such in the context of indigenous peoples and the right to FPIC as "it is difficult to give full effect to informed consent in the absence of an environmental assessment".[332] An obligation to conduct social and environmental impact assessments also exists under the UNDROP in the context of the exploitation of natural resources held or used by peasants and other people working in rural areas.[333] These impact assessments are required in addition to good faith consultations as well as fair and equitable benefit-sharing.[334]

Human rights impact assessments may take a number of forms and are undertaken with various motivations and purposes.[335] As Walker notes, HRIAs may be motivated by concern over the enjoyment of particular rights; the impact of particular projects or policies; or the impact of the work of human rights organisations.[336] For the purposes of this dissertation, the primary focus will be on HRIAs as a preventative tool to determine potential impacts. This should be distinguished, for example, from HRIAs undertaken after the fact for the purpose of assessing the effectiveness of measures taken for the realisation of the Covenant

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[328] Craik "EIA" in *Principles of Environmental Law* 202.
[329] 201-202.
[330] 202.
[331] 204. See also UNHRC *Report of the Independent Expert on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment, John H Knox: Mapping Report* (30 December 2013) A/HRC/25/53 para 29-43.
[332] Craik "EIA" in *Principles of Environmental Law* 204.
[333] UNGA *United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas* (21 January 2019) A/RES/73/165 article 5(2)(a).
[334] Article 5(2)(b)-(c).
[335] S Walker "Human Rights Impact Assessments: Emerging Practice and Challenges" in E Riedel, G Giacca & C Golay *Economic, Social and Cultural Rights in International Law: Contemporary Issues and Challenges* (2014) 391 392-394. See also Perelman "HR, Investment & Rights-ification of Development" in *The Future of ESR* 457.
[336] In relation to HRIAs in the context of economic reforms see, for example, UNHRC *Report of the Independent Expert on the Effects of Foreign Debt and Other Related International Financial Obligations of States on the Full Enjoyment of Human Rights, particularly Economic, Social and Cultural Rights*: *Guiding Principles on Human Rights Impact Assessments of Economic Reforms* (19 December 2018) A/HRC/40/57.

or a particular right.[337] In the context of the exploitation of natural resources, an HRIA is a preventative tool to assess the impacts on human rights of particular activities, projects or policies prior to initiation of such action.[338] Although some HRIAs are undertaken after the fact, this usually occurs where the assessment relates to the effectiveness of policies or projects intended to advance human rights. In the context of natural resources exploitation, HRIAs will most often be undertaken prior to the commencement of the relevant activity in order to identify unintended human rights impacts before they occur.

HRIAs are increasingly required in the context of trade and investment agreements, which often have important implications for projects related to natural resource exploitation.[339] As Walker points out, the categories of human rights cannot be neatly compartmentalised in such processes, so in practice HRIAs would assess all potential human rights impacts resulting from the relevant conduct, including impacts on civil, political, economic, social and cultural rights.[340] Given the wide variety of contexts and uses for HRIAs it is not possible to define any scope or content for HRIAs that will be applicable in all circumstances. A project-specific HRIA might only assess impacts on a particular local community, which would likely require a very different approach to a broader HRIA related to policy decisions affecting an entire population.[341] In all cases, however, HRIAs can be distinguished from generic social impact assessments as they set out possible impacts in terms of human rights norms and standards with reference to relevant human rights instruments.[342] The HRIA process should also ensure respect for procedural rights and principles "such as non-discrimination, participation, inclusion and accountability".[343]

The 2011 UN Guiding Principles on Business and Human Rights ("Guiding Principles") include certain principles related to human rights due diligence, of which HRIAs form part.[344]

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[337] Walker "*Human Rights Impact Assessments*" in *ESCRs in International Law* 392-394. See also Perelman "HR, Investment & Rights-ification of Development" in *The Future of ESR* 457.
[338] Perelman "HR, Investment & Rights-ification of Development" in *The Future of ESR* 456; Walker "*Human Rights Impact Assessments*" in *ESCRs in International Law* 396 & 398.
[339] Walker "*Human Rights Impact Assessments*" in *ESCRs in International Law* 393; Perelman "HR, Investment & Rights-ification of Development" in *The Future of ESR* 454. See also UNHRC *Addendum to the Report of the Special Rapporteur on the Right to Food, Olivier De Schutter: Guiding Principles on Human Rights Impact Assessments of Trade and Investment Agreements* (19 December 2011) A/HRC/19/59/Add5; CESCR *Concluding Observations, Switzerland* (26 November 2010) E/C12/CHE/CO/2-3 para 24; CESCR *Concluding Observations, Austria* (13 December 2013) E/C12/AUT/CO/4 para 11; CESCR *Kazakhstan* (2019) para 17.
[340] Walker "*Human Rights Impact Assessments*" in *ESCRs in International Law* 393.
[341] Walker "*Human Rights Impact Assessments*" in *ESCRs in International Law* 397.
[342] Walker "*Human Rights Impact Assessments*" in *ESCRs in International Law* 399; Perelman "HR, Investment & Rights-ification of Development" in *The Future of ESR* 455.
[343] Walker "*Human Rights Impact Assessments*" in *ESCRs in International Law* 399.
[344] UNHRC *Report of the Special Representative of the Secretary-General on the Issue of Human Rights and Transnational Corporations and Other Business Enterprises, John Ruggie: Guiding Principles on Business*

Human rights due diligence is the process by which entities "identify, prevent, mitigate and account for how they address their adverse human rights impacts", and this includes an assessment of human rights impacts.[345] The Guiding Principles recognise that such due diligence will vary according to the nature and content of the relevant operations and the associated risks.[346] They also require this due diligence to be ongoing as risks may change "as the business enterprise's operations and operating context evolve".[347] With respect to exploitation of natural resources and the often incremental and cumulative environmental impacts they may cause, the requirement for ongoing human rights due diligence is significant.[348] In relation to HRIAs, the Guiding Principles require a process which includes reliance on human rights expertise;[349] meaningful consultation with those affected;[350] integration of findings into the functions and processes of the business;[351] tracking the effectiveness of responses to human rights impacts;[352] and communicating and reporting on how human rights impacts have been addressed.[353]

While the Guiding Principles have made a significant contribution to corporate accountability in international law, Morgera notes that there has been considerable criticism from human rights scholars. It has been argued, for example, that the language of human rights 'impacts' rather than the more legal 'violations' indicates a shift to a managerial approach to corporate human rights accountability.[354] Some of these challenges and criticisms are illustrated by Perelman's study of HRIAs conducted by corporations in the context of large-scale natural resource exploitation.[355] Perelman cautions that the use of ESCR standards and HRIAs by large foreign corporations in extractive industries may lead to a privatisation of human rights and links this to "a broader co-option of human rights discourse".[356] Perelman notes, for example:

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and Human Rights (21 March 2011) A/HRC/17/31. See also E Morgera "Corporate accountability" in E Morgera & K Kulovesi (eds) *Research Handbook on International Law and Natural Resources* (2016) 109 116-120.

[345] UNHRC *Guiding Principles on Business & HR* (2011) A/HRC/17/31 para 17.

[346] Para 17.

[347] Para 17.

[348] One could perhaps argue that environmental changes as a result of business operations (or for other reasons) would constitute an evolution of a business enterprise's "operating context". UNHRC *Guiding Principles on Business & HR* (2011) A/HRC/17/31 para 17.

[349] UNHRC *Guiding Principles on Business & HR* (2011) A/HRC/17/31 para 18.

[350] Para 18.

[351] Para 19.

[352] Para 20.

[353] Para 21. See also Morgera "Corporate accountability" in *International Law & Natural Resources* 119.

[354] See Morgera "Corporate accountability" in *International Law & Natural Resources* 120 with reference to S Deva "Treating Human Rights Lightly: A Critique of the Consensus Rhetoric and the Language Employed by the Guiding Principles" in S Deva and D Bilchitz (eds) *Human Rights Obligations of Business: Beyond the Corporate Responsibility to Protect?* (2013) 78 78.

[355] See Perelman "HR, Investment & Rights-ification of Development" in *The Future of ESR*.

[356] Perelman "HR, Investment & Rights-ification of Development" in *The Future of ESR* 460-461.

> "In the context of extractive industries, where the location of investment is bound to resource-rich countries, many [corporate human rights practitioners] see their role as having to deal with 'failed' or corrupt states that have 'less concerns about human rights or environmental issues than developed countries may have', evidently not acknowledging the broader postcolonial dynamics in the political economy of natural resources and the regulatory race to the bottom".[357]

The corporation may then become the "'vehicle' for human rights realization, including ESCR fulfilment".[358] In such instances, States Parties must impose the necessary obligations on private actors to protect ESCRs.[359] While HRIAs can encourage private companies to consider and respect human rights, there are also concerns that companies can "reappropriate" human rights in this context.[360] Perelman notes that the use of the term "impact assessment" associates human rights with risk management, ultimately leading to "the absorption and prioritization of human rights in a risk assessment framework and a remedial blueprint – decided on the terms of corporate risk matrices".[361] In light of the above, it is therefore important that, where States Parties to the Covenant regulate EIA and HRIA processes in their jurisdictions, they ensure that these impact assessments do not render ESCR impacts as mere calculated risks. States Parties must ensure that both the content and conduct of impact assessments for natural resource exploitation respect and protect ESCRs, bearing in mind the need for a safe, healthy, and clean environment for the continued realisation of these rights.

The Committee recognises the potential negative impacts on ESCRs that may result from the exploitation of natural resources and has noted on numerous occasions that State Parties should make provision for an assessment of such impacts.[362] However, the Committee has been inconsistent in its recommendations related to HRIAs and EIAs where natural resource exploitation is concerned. The Committee has, at various times, recommended the assessment of specific impacts;[363] the assessment of human rights and environmental impacts;[364] the assessment of environmental impacts;[365] or the assessment

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[357] Perelman "HR, Investment & Rights-ification of Development" in *The Future of ESR* 460, quoting an interview conducted by Perelman with a corporate human rights practitioner.
[358] Perelman "HR, Investment & Rights-ification of Development" in *The Future of ESR* 460.
[359] On circumstances where corporations become service providers, see O De Schutter "Corporations and Economic Social and Cultural Rights" in Riedel E, G Giacca & C Golay (eds) *Economic, Social and Cultural Rights in International Law: Contemporary Issues and Challenges* (2014) 193 204-208.
[360] Perelman "HR, Investment & Rights-ification of Development" in *The Future of ESR* 465.
[361] Perelman "HR, Investment & Rights-ification of Development" in *The Future of ESR* 468.
[362] See, for example, OHCHR *Mapping Human Rights Obligations relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment: Individual Report on the International Covenant on Economic, Social and Cultural Rights* (December 2013) paras 46-51.
[363] CESCR *Peru* (2012) para 22; CESCR *Israel* (2019) para 44-45; CESCR *Argentina* (2018) para 57-58.
[364] CESCR *Namibia* (2016) para 13; CESCR *Mali* (2018) para 43-44; CESCR *Cameroon* (2019) para 16-17; CESCR *Concluding Observations, Mongolia* (7 July 2015) E/C12/MNG/CO/4 para 9.
[365]CESCR *Canada* (2016) para 54; CESCR *Chad* (2009) para 13; CESCR *Cambodia* (2009) para 15.

of "impacts" without specification.[366] While there may be circumstantial and contextual reasons for these differences in the terminology of its recommendations, greater clarity is needed on the scope of the obligation on States Parties when it comes to the assessment of natural resource-related activities.

However, it is clear from the Committee's work that it is in support of impact assessments. In General Comment 15 on the right to water the Committee affirmed that ensuring sufficient and safe water for present and future generations may require "assessing the impacts of actions that may impinge upon water availability and natural ecosystem watersheds, such as climate changes, desertification and increased soil salinity, deforestation and loss of biodiversity".[367] The use of both EIAs and HRIAs was also promoted by the Committee in its statement in the context of the Rio+20 Conference, where participants were encouraged to "adopt recommendations for making not only environmental impact assessments, but also human rights assessments when policies are adopted and implemented that affect the human environment and may lead, for example, to forced displacement for ecological reasons".[368]

In relation to the regulation of EIAs and HRIAs by States Parties, the Committee's concluding observations have recommended, for example, that States Parties "adopt a regulatory framework for hydraulic fracturing, including impact assessments";[369] develop clear guidelines and rules for assessing the impact of natural resource exploitation on ESCRs and the environment;[370] strengthen legislation in relation to extractive activities;[371] and enact legislation requiring HRIAs "for activities such as waste management, mining and quarrying activities, land use and development activities" prior to granting environmental authorisation for such activities.[372]

In the case of Peru, the Committee emphasised the need for impact assessments to be undertaken prior to the granting of licences as well as the need for such assessments to be independent.[373] Independence in the conduct of assessments is a key concern for EIAs and HRIAs. Perelman notes, for example, the "bias perception" inherent in both corporate-led

[366] CESCR *Concluding Observations, Ethiopia* (31 May 2012) para 24; CESCR *Concluding Observations, Kuwait* (19 December 2013) E/C12/KWT/CO/2 para 31.
[367] CESCR *General Comment No 15* para 28.
[368] CESCR *Statement in the Context of the Rio+20 Conference on "The Green Economy in the Context of Sustainable Development and Poverty Eradication"* (4 June 2012) E/C12/2012/1 para 7.
[369] CESCR *Argentina* (2018) para 57-58.
[370] CESCR *Mali* (2018) para 43-44; CESCR *Cameroon* (2019) para 16-17.
[371] CESCR *Canada* (2016) para 53-54.
[372] CESCR *Namibia* (2016) para 13-14.
[373] CESCR *Peru* (2012) para 22.

and community-led HRIAs.[374] Stricter regulatory and legislative approaches to independent assessments could minimise this. In its 2019 concluding observations in respect of Israel, the Committee recommended "scientific assessment of the impact on Palestinians of herbicide spraying, on their livelihoods, health, food security and environment".[375] In addition to being an interesting example of the Committee recommending a specific impact assessment, this recommendation illustrates the important role of expertise in EIAs and HRIAs. Particularly where natural resources and the environment are concerned, impact assessments will depend on the expertise of a wide range of specialists such as ecologists, doctors, hydrologists, geologists and climatologists. Where properly regulated, independent assessments from such experts can assist regulators in making informed decisions on permits or licences for natural resource exploitation, and it can also assist the Committee in establishing the objective impacts of certain activities on ESCRs.[376]

While not exclusively related to the exploitation of natural resources, General Comment 24 requires HRIAs in relation to the conclusion of trade and investment treaties,[377] and requires that such HRIAs incorporate impacts on indigenous peoples where appropriate.[378] The Committee's concluding observations confirm this obligation to undertake HRIAs in relation to trade, investment and development cooperation,[379] often pointing States Parties to the Guiding Principles on Human Rights Impact Assessments of Trade and Investment Agreements that were recommended by the former Special Rapporteur on the Right to Food, Olivier De Schutter.[380] In 2019, in the case of Kazakhstan, the Committee recommended that trade and investment agreements as well as licencing investments

[374] See Perelman "HR, Investment & Rights-ification of Development" in *The Future of ESR* 457-458. Perelman also notes that there are attempts to address the problem of bias through collaborative HRIAs. See Perelman "HR, Investment & Rights-ification of Development" in *The Future of ESR* 463-464.
[375] CESCR *Israel* (2019) para 44-45.
[376] See CESCR *General Comment No 25 on Science and Economic, Social and Cultural Rights* (Art 15(1)(b), 15(2), 15(3) and 15(4)) (7 April 2020) E/C12/GC/25 para 53-54 where the Committee recognises the benefit of using scientific knowledge in decision-making and policies, and emphasises the importance of transparency and participation. Although this is a broad reference to scientific study, these principles are also applicable to project-specific impact assessments.
[377] CESCR *General Comment No 24* para 13.
[378] CESCR *General Comment No 24* para 17. See also para 38 which asserts that States Parties should ensure that the information in HRIAs is accessible to indigenous peoples.
[379] CESCR *Switzerland* (2010) para 24; CESCR *Concluding Observations, Norway* (13 December 2013) E/C12/NOR/CO/5 para 6; CESCR *Austria* (2013) para 11; CESCR *Concluding Observations, Germany* (27 November 2018) E/C12/DEU/CO/6 para 12-13 & 17; CESCR *Canada* (2016) para 16; CESCR *United Kingdom* (2016) para 14-15. It is interesting to note that the Committee predominantly notes this responsibility in relation to developed states. However, see also CESCR *Kenya* (2016) para 13-14, where the Committee expresses regret that negotiations for an agreement with the European Union were not preceded by a HRIA given potential impacts on small-scale farmers and fishers.
[380] UNHRC *Guiding Principles on Human Rights Impact Assessments of Trade and Investment Agreements* (2011) A/HRC/19/59/Add5.

should be preceded by both HRIAs and EIAs.[381] This may be an indication that in future the Committee could require States Parties to undertake EIAs more frequently in relation to trade and investment decisions. This is particularly important in light of issues of global concern such as climate change, which is driven in large part by investment in the fossil fuel industry.[382]

Impact assessments should also be undertaken in the context of extraterritorial activities. The Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights require states to conduct an assessment "of the risks and potential extraterritorial impacts of their laws, policies and practices on the enjoyment of economic, social and cultural rights".[383] The principles also assert that the results of such assessment should be made public and should inform the measures that States Parties adopt.[384]

Given the inextricable relationship between natural resource exploitation, the environment, and human rights, it is important that impact assessments for natural resource exploitation include both EIAs and HRIAs or, where necessary, an integrated process for environmental and human rights impact assessment. The dependence of human rights on the natural environment means that environmental impacts are a fundamental consideration in HRIAs. It is therefore unacceptable to undertake HRIAs related to the environment without also considering environmental impacts. For example, an accurate understanding of impacts on the right to health of a coal-fired power station cannot be properly understood without detailed information regarding emissions and the impacts on air quality (not to

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[381] CESCR *Kazakhstan* (2019) para 17.

[382] The impacts of such investments on climate change have led to widespread movements for divestment from fossil fuels, although the efficacy of such measures is debated. See for example, J Ambrose "JP Morgan to Withdraw Support for Some Fossil Fuels" (25-02-2020) *The Guardian* <https://www.theguardian.com/business/2020/feb/25/jp-morgan-chase-loans-fossil-fuels-arctic-oil-coal> (accessed 22-04-2020); R Savage "London, New York Mayors urge Cities to Divest from Fossil Fuels" (08-01-2020) *Reuters* <https://www.reuters.com/article/us-britain-climate-finance-trfn/london-new-york-mayors-urge-cities-to-divest-from-fossil-fuels-idUSKBN1Z7211> (accessed 22-04-2020); S Andreasson "Fossil Fuel Divestment Will Increase Carbon Emissions, Not Lower Them – here's why" (25-11-2019) *The Conversation* <https://theconversation.com/fossil-fuel-divestment-will-increase-carbon-emissions-not-lower-them-heres-why-126392> (accessed 22-04-2020). While complete divestment may not always be possible or practical, States Parties should at the very least undertake assessments of the possible impact of trade and investment decisions related to fossil fuels in order to determine the best course of action.

[383] "Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights" (2011) 29 *Netherlands Quarterly of HR* 578-590 para 14. See 578 where it is explained that the Maastricht Principles on ETOs are a set of principles drawn up by international experts that clarify and restate existing human rights law related to extraterritorial obligations. See also M Langford, W Vandenhole, M Scheinin & W van Genugten "Introduction" in M Langford, W Vandenhole, M Scheinin & W van Genugten (eds) *Global Justice, State Duties: The Extraterritorial Scope of Economic, Social and Cultural Rights in International Law* (2013) 3 12.

[384] "Maastricht Principles on ETOs" (2011) *Netherlands Quarterly of HR* para 14.

mention the broader climate change impacts) and their implications for human health.[385] Similarly, the duties of States Parties and non-state actors in relation to human rights mean that conducting EIAs without consideration of the impact on human rights should be considered inappropriate and irresponsible where there is any risk that human rights are potentially affected, even where such effects are indirect or only established in the long term.

In conclusion, the exploitation of natural resources can generate significant revenue which can be directed towards the progressive realisation of ESCRs, and some States Parties are more dependent on such exploitation of natural resources than others. However, it is clear that the impacts of these activities can be far reaching and require regulation, participation of local communities, and extensive assessment of potential impacts. In many cases the risks associated with natural resource exploitation and the potential impacts on ESCRs may outweigh the ultimate benefits for ESCRs in terms of revenue generated. Regardless, where a State Party seeks to use the maximum of its available natural resources, it will need to carefully consider the long-term impacts of natural resource extraction and consumption on ESCRs and the environment as well as the necessity of natural resources for the realisation of many ESCRs.

5 4 3 Availability and principles of IEL

Having investigated the current understanding of the availability of resources under article 2(1), and the particular relevance of the exploitation of natural resources in this context, this section considers the integration of environmental considerations within the meaning of the concept of "availability", including its relationship to natural resource exploitation. Environmental considerations and the principles of IEL may imply limits for those resources which are available to States Parties, and they might also provide guidance on how natural resources can be responsibly made available for the realisation of ESCRs.

As noted above, some authors propose that environmental considerations or sustainability may function as a factor excluding certain resources from the pool of resources "available" for the realisation of ESCRs.[386] The principle of sustainable use qualifies the availability of natural resources by suggesting that only those resources which can be used sustainably over the long term should be considered available for the purposes of article 2(1). Although natural resources are accessible and present within a State Party's

[385] See, for example, *Earthlife Africa Johannesburg v Minister of Environmental Affairs and Others* 2017 2 All SA 519 (GP).
[386] See 5 4 1 above. See Uprimny, Hernández & Araújo "Bridging the Gap" in *The Future of ESR* 653; Shahid *For Want of Resources* 11.

jurisdiction, they may be seen as unavailable where it is not possible to use them without depleting the resource and causing long-term harm to ESCRs and the environment. In other words, where a resource cannot be sustainably used, it should be deemed unavailable.

In respect of private resources, natural resources that are vital for the realisation of ESCRs for the whole population, but have been allocated to private parties, should be seen as available to the State Party. For example, where water resources have been allocated to private individuals or companies in the form of water rights, licences or allocations, these should be included in a State Party's assessment of the resources available for the right to water, particularly where these may be required to meet basic needs in a time of drought. In extreme cases where access to water is limited due to drought and the basic water needs of the population cannot be met, a State Party could revoke licences for industrial water use, particularly where such use is excessive.[387] Other private resources that can be considered available to State Parties are the financial and other resources of polluters who should, in accordance with the polluter pays principle, be required to provide resources for the purposes of remediation and compensation for environmental harm. Where polluters have provided compensation to the state for harm to the environment and human rights in the form of administrative fines or payment of damages the state should ensure that those resources are not redirected elsewhere, but are spent on the rehabilitation of the relevant area as well as on the promotion of ESCRs in the affected community.

In light of the duty of cooperation associated with state sovereignty and the principle of intragenerational equity, it is important to note that not all natural resources within a State Party's territory should be considered completely available for use or consumption by that State Party. Where shared resources are concerned it is essential that States Parties consider the needs of other states or peoples dependent on the relevant resource. Once again, the right to water is a good example of this. Where a shared river flows from one state to another, it would be entirely inconsistent with the Covenant and the principle of intragenerational equity for a State Party to use all the water in that river for non-essential industrial uses, particularly where individuals downstream in the neighbouring state are dependent on that water for their basic needs.[388] International cooperation and assistance

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[387] See CESCR *Chile* (2015) para 27 in relation to excessive water use by the mining industry. See also UNGA *United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas* (21 January 2019) A/RES/73/165 article 21(5) on the prioritisation of human needs with respect to water use.

[388] For an example of such conflict over a shared watercourse, see A Zolyniak "Navigating Rough Waters: The Limitations of International Watercourse Governance" (02-09-2020) *Council on Foreign Relations* <https://www.cfr.org/blog/navigating-rough-waters-limitations-international-watercourse-governance> (accessed 10-11-2020) which discusses, among others, the conflict between Egypt, Sudan and Ethiopia regarding the use of the Nile and an Ethiopian dam project that threatens access to water.

under article 2(1) are particularly important in such cases and should take into account what is necessary for the realisation of ESCRs, prioritising core obligations.

As noted above, 'available resources' include those resources available to the State Party through international assistance and cooperation.[389] The principle of CBDR is a useful guide for interpretation in this regard as it underscores the increased responsibility on certain states to provide international assistance and cooperation. While the provision of international resources for the purposes of article 2(1) is an obligation on all States Parties, this principle of IEL can serve as a guide indicating which States Parties should be approached for assistance first or which have stronger obligations, for example due to their increased capacities or responsibility for environmental harm. This is, of course, of particular relevance where climate change is concerned as the principle of CBDR is most prominent within the climate change regime.[390] States Parties that have contributed to environmental harm which threatens ESCRs in another jurisdiction should be held responsible for providing the necessary assistance and cooperation, and therefore resources, to remedy the situation and ensure that ESCRs are provided for. This should be seen as an obligation over and above the general obligation to provide assistance and cooperation to other States Parties where they have insufficient resources for this purpose.

In accordance with the principle of prevention and the no-harm principle natural resources should not be considered available for the purposes of article 2(1) where extraction of the relevant resources would necessarily result in significant environmental harm or would cause significant transboundary harm. Where natural resources could *potentially* cause harm then they should still be considered available, but their exploitation will be subject to the exercise of due diligence and related EIAs and HRIAs as well as appropriate application of the precautionary principle.[391] The extraction processes associated with hydraulic fracturing (or fracking) could, for example, be understood in these terms. The likely significant and far-reaching harm to the environment and to ESCRs as a result of hydraulic fracturing should be prevented in accordance with the precautionary principle and the associated natural gas resources are therefore not available to the State Party for the purposes of the Covenant.[392] A similar argument could be made that certain fossil fuels (or thresholds thereof) must not be considered available resources for the purposes of article

[389] See 5 3 1 and 5 4 1 above.
[390] See Chapter 4, 4 3 4.
[391] The precautionary principle is discussed at Chapter 4, 4 3 2 4.
[392] See CESCR *Argentina* (2018) para 13-14 where the Committee expresses concern regarding the potential impact of planned hydraulic fracturing on the State Party's commitments under the Paris Agreement.

2(1) given the significant damage to the climate and to human rights as a result of fossil fuel-related emissions. It would be illogical, and inconsistent with a teleological interpretation of the Covenant, to permit the use of resources for the realisation of ESCRs by way of an activity that itself causes harm to ESCRs.

Finally, it must be noted that where natural resources are concerned, their availability does not necessarily mean that their use is appropriate or consistent with Covenant objectives. There may not be a risk of depleting a particular natural resource, and it could be considered available in a theoretical sense, but the process of extracting the resource may result in significant harm, particularly for indigenous and local communities. Where the benefits of extracting or exploiting available natural resources do not outweigh the resultant environmental harm and threats to ESCRs, the principle of prevention should be applied, bearing in mind that much environmental harm is irreversible. Impact assessments are an important tool for determining the nature and extent of the potential impacts and they can assist in ensuring that the full range of risks and impacts form part of the decision-making process. Where the impacts of such activities are as yet uncertain, but potentially significant, the precautionary principle should be applied.[393] The long-term harm to ESCRs from environmental degradation should therefore be prevented and should not be permitted for the sake of temporary and unsustainable benefits to Covenant rights.

The interpretation of available resources in the context of article 2(1) must therefore take potential environmental harm into account. Natural resources should not be considered available where their exploitation or extraction will cause harm to ESCRs or will cause irreversible environmental harm. Impact assessments must be undertaken to determine whether or not natural resources can be exploited without causing harm to ESCRs or the environment on which they depend. Such an approach to the availability of resources prevents harm to ESCRs as a result of environmental degradation or the depletion of natural resources, and is therefore appropriate in light of the interpretive principle of effectiveness.[394] The section below considers the interpretation of “maximum” in article 2(1) of the Covenant.

[393] See Chapter 4, 4 3 2 4 on the precautionary principle.
[394] See Chapter 3, 3 3 3 2 1 where the principle of effectiveness is discussed.

5 5 The meaning of "maximum"

5 5 1 Current interpretation

Article 2(1) requires States Parties to use the "maximum" of their available resources. Given the relationship between ESCRs and the "inherent dignity of the human person"[395] as well as the objective of "establish[ing] clear obligations for States parties in respect of the full realization of [ESCRs]",[396] it is appropriate for States Parties to be obligated to use the greatest possible amount of resources necessary for the fulfilment of the rights in the Covenant. Shahid suggests that "maximum" available resources "must represent the broadest possible definition of resources in mobilisation and the most inclusive methods of allocation".[397]

Given the priority of human rights over other interests, Robertson notes that the use of the maximum available resources should only be limited to the extent that other human rights may be infringed upon:

> "Because human rights necessarily claim priority over all other considerations, governments must, at least in theory, marshall all the resources needed for their satisfaction, up to the point where this would infringe upon the satisfaction of other human rights".[398]

As a result of the requirement to use 'maximum' available resources, a strong justification is required where States Parties withhold resources that could potentially assist in the realisation of ESCRs. This is particularly important in respect of minimum core obligations. In General Comment 3, the Committee notes that a State Party relying on a lack of resources where it has failed to meet minimum core obligations, "must demonstrate that every effort has been made to use all resources that are at its disposition in an effort to satisfy, as a matter of priority, those minimum obligations".[399]

The term "maximum" relates to the quantity of resources, essentially indicating that all possible resources should be used for the fulfilment of ESCRs. When this is read with the concept of progressive realisation in article 2(1) it implies an open-ended growth and a correlative perpetual use of resources. However, it is clear that the planet's resources have limits, and a model of unimpeded economic growth is not sustainable. It may therefore be necessary to impose limits on the extent of resource use in order to ensure the realisation of ESCRs over the long term. However, as noted above,[400] this dissertation proposes

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[395] ICESCR preamble.
[396] CESCR *General Comment No 3* para 9.
[397] Shahid *For Want of Resources* 12.
[398] Robertson (1994) *Human Rights Quarterly* 700.
[399] CESCR *General Comment No 3* para 10. See Chapter 6, 6 2 in relation to core obligations.
[400] See sections 5 4 1 and 5 4 3.

addressing the problem of limited resources and sustainability through a broader understanding of 'availability', so as to exclude those resources which cannot be sustainably used. This would then reduce the pool of resources to which 'maximum resources' refers.

5 5 2 "Maximum" and principles of IEL

As noted above, the obligation to use the *maximum* of available resources emphasises the importance of human rights and the need to prioritise human rights, and ESCRs in particular, over other resource needs. In other words, the maximum amount of resources must be dedicated to the enjoyment of ESCRs (and core obligations in particular) before allocating resources to other areas. This should only be limited at "the point where this would infringe upon the satisfaction of other human rights".[401]

In order to ensure that ESCRs are not unduly infringed by environmental degradation in the course of States Parties using the maximum of their available resources, decision-making around resource use, mobilisation and allocation should, at a minimum, take environmental factors into account. In accordance with sustainable development and the principle of integration, plans, policies and programmes relating to resource use, mobilisation and allocation should seek to balance economic, social and environmental factors.[402]

Similarly, in using the maximum of available resources States Parties should consider the realisation of ESCRs over the long term and the ESCRs of future generations. The long-term dimension of progressive realisation and the position of future generations is examined in detail in Chapter 6. For present purposes it is useful to note that although the principle of intergenerational equity does not mean prioritising future generations over current needs, it does require that future needs at least be taken into consideration. Some commentators have recognised the intergenerational inequity resulting from austerity measures and financial crises, and it is proposed that environmental impacts on future generations should similarly be taken into account.[403] In making resource-related decisions States Parties should therefore ensure that their actions take future generations into account and do not cause inequitable harm to such future generations.[404]

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[401] Robertson (1994) *Human Rights Quarterly* 700. See 5 5 1 above.
[402] See Chapter 4, 4 3 1 2 for a discussion of the principle of integration.
[403] See De Schutter "Public Budget Analysis" in *The Future of ESR* 541 and M Dowell-Jones "The Sovereign Bond Markets and Socio-Economic Rights" in Riedel E, G Giacca & C Golay (eds) *Economic, Social and Cultural Rights in International Law: Contemporary Issues and Challenges* (2014) 51 66.
[404] See Chapter 6, 6 3 3. See also CESCR *General Comment No 25* para 56 where the Committee refers to inequitable harm to future generations in the context of the precautionary principle.

States Parties need to plan for the future of the current population as well as for future generations by considering the long-term impact and sustainability of present resource decisions.[405] Resource decisions which would result in long-term environmental harm impacting on ESCRs would need to apply the principle of prevention. In doing so, States Parties must bear in mind that even where ESCRs can be advanced in the short term, if this results in significant or permanent loss of ecosystem services in the long term, it may ultimately be more detrimental to Covenant rights.[406] Applying the principle of prevention may also require States Parties to devote resources to environmental protection where there is a threat to ESCRs as a result of potential environmental harm. This would include devoting resources to any necessary EIAs and HRIAs where there is potential environmental damage.

In relation to natural resources, maximising resource use will not always mean that these resources should be exploited for financial revenue. Exploiting natural resources will often involve significant long-term financial costs and risks which should be factored into such decisions. For example, activities which result in significant GHG emissions might seem to have substantial financial benefits, but States Parties must consider these benefits alongside the considerable risks of climate change and the costs related to mitigation, adaption, and recovery from climate change impacts. Maximising natural resources and the fundamental features of the environment necessary for ESCRs may therefore require financial resources to be directed towards environmental protection. For example, ensuring that available water resources are utilised to their maximum for the realisation of Covenant rights could require spending substantial resources on pollution prevention and the protection of natural water sources as well as on efficient water systems to reduce wastage.[407] Such measures would assist in ensuring that the water resources themselves are “maximised” in accordance with their inherent value and that they provide the greatest possible benefit for the realisation of ESCRs. Similarly, maximising natural resources for the realisation of the right to housing could include for example, the protection and conservation of wetlands that have an inherent capacity to protect homes from flooding and thereby promote resilience against certain extreme weather events.[408] Such an approach is akin to

[405] CESCR *General Comment No 1: Reporting by States Parties* (27 July 1981) E/1989/22 para 4. See also, for example, CESCR *General Comment No 13* para 52; CESCR *General Comment No 14* para 36. See also Chapter 6, 6 3 1 on the obligation to adopt plans and strategies for implementation.
[406] See Chapter 4, 4 3 2 3 for a discussion of the principle of prevention.
[407] See, for example, UNHRC *Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Catarina de Albuquerque* (11 July 2013) A/HRC/24/44. See also 5 6 3 below.
[408] See CESCR *General Comment No 4: The Right to Adequate Housing (Art 11(1) of the Covenant)* (13 December 1991) E/1992/23 para 8(d). On the capacity of wetlands for disaster risk reduction see, for example,

Skogly's description of a qualitative approach to resources, as it pays attention to the nature of the resource in question and not merely its potential economic use. Maximising resource use qualitatively thus ensures that resources are managed and used to provide the maximum benefit to the enjoyment of ESCRs, as opposed to an approach which seeks to provide the maximum quantitative amount of resources for the realisation of ESCRs.[409]

While the principle of sustainable use is applied to many natural resources which can be exploited and commodified, it is also necessary to consider the sustainable use of those aspects of the environment which are vital determinants of ESCRs.[410] For example, clean air is fundamental to the rights to health and an adequate standard of living. Maximising resource use should include maximising benefits of resources such as clean air by directing necessary financial, organisational and human resources towards the regulation and monitoring of air quality as well as atmospheric emissions. Spending resources on protecting the environmental base, in this case clean air, ultimately enhances public health and reduces the burden of pollution-related illnesses on the public healthcare system.[411] In the long run this ensures that funds are not spent on preventable illnesses, leaving more resources available for progressively realising ESCRs. The exploitation of natural resources and impacts on the environment should therefore be considered in light of the benefits of these environmental elements and, particularly in the case of indigenous peoples, the role of the environment in supporting and promoting other ESCRs.

Incorporating environmental considerations into an understanding of maximum available resources also requires a more integrated understanding of budgeting and resource allocation that includes environmental factors which contribute to the enjoyment of Covenant rights. Where resources are devoted to environmental protection for the sake of preserving the fundamental determinants of ESCRs for present or future generations, such resources may need to be viewed as expenses related to the fulfilment of Covenant rights. Of course, it is important that such an approach does not create a loophole for States Parties to allocate significant resources to environmental conservation where it is not warranted for the

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UNEP "Wetlands Limit Impact of Floods, Drought, Cyclones" (31-01-2017) *UN Environment Programme* <https://www.unenvironment.org/news-and-stories/story/wetlands-limit-impact-floods-drought-cyclones> (accessed 06-11-2020); Ramsar Convention Secretariat *Global Wetland Outlook: State of the World's Wetlands and their Services to People* (2018) 40.

[409] See Skogly (2012) *Human Rights Law Review* 393-420 and 5 3 1 above in relation to this qualitative approach to resources.

[410] See, for example, CESCR *General Comment No 12* para 25.

[411] In relation to the burden of disease related to air pollution see UNEP *GEO-6: Healthy Planet, Healthy People* 108 & 125 as well as Chapter 2, 2 1 above. See also UNHRC *Report of the Special Rapporteur on the Issue of Human Rights Obligations relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment: Clean Air* (8 January 2019) A/HRC/40/55.

realisation of ESCRs, thereby prioritising non-essential environmental endeavours over their binding obligations under the Covenant. The importance of prioritising minimum core obligations and the needs of the most marginalised and disadvantaged remains. The allocation of resources for such spending on environmental protection could therefore be seen as part of the maximum available resources devoted to ESCRs.

5 6 Equitable and effective use of resources

5 6 1 Current interpretation

Compiled by a group of international law experts, the Limburg Principles on the Implementation of the International Covenant on Economic, Social and Cultural Rights ("Limburg Principles") comment on the meaning and interpretation of maximum available resources.[412] The Limburg Principles note that adequate measures taken for the realisation of ESCRs should include "equitable and effective use of and access to the available resources".[413] While the analysis above on the meaning of "resources", "availability", and "maximum" has focused on the type of resources available for use as well as the quantity of these resources, the requirement of ensuring equitable and effective use of these resources emphasises the ways in which these resources are put to use for the purposes of fulfilling ESCRs.

Equitable use relates to the principles of non-discrimination and equality which are fundamental to the Covenant.[414] In using the maximum of its available resources to realise Covenant rights, a State Party must ensure that access to, and allocation of, resources does not discriminate against or exclude any groups, particularly those who are disadvantaged and marginalised.[415] In addition, equitable use can be linked to the imperative to address

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[412] "The Limburg Principles on the Implementation of the International Covenant on Economic, Social and Cultural Rights" (1987) 9 *HR Quarterly* 122-135 para 25-28. The Limburg Principles reflect an effort from experts to compile and present a list of principles that reflect the state of international law with regard to ESCRs at the time of their publication. See Sepúlveda *Nature of Obligations under the ICESCR* 64-65.

[413] "The Limburg Principles" (1987) *HR Quarterly* para 27. See also Dankwa & Flinterman (1987) *HR Quarterly* 140.

[414] In relation to non-discrimination and equality under the Covenant, see ICESCR article 2(2), 3, 7(a)(i), 7(c), 10(3) & 13. See also, for example, CESCR *General Comment No 5* para 5 & 15; CESCR *General Comment No 6* para 11-13; CESCR *General Comment No 12* para 18; CESCR *General Comment No 13* para 31; CESCR *General Comment No 14* para 18; CESCR *General Comment No 15* para 17; CESCR *General Comment No 16*: *The Equal Right of Men and Women to the Enjoyment of all Economic, Social and Cultural Rights (Art 3 of the Covenant)* (11 August 2005) E/C12/2005/4; CESCR *General Comment No 19* para 40; CESCR *General Comment No 20*; CESCR *General Comment No 21* para 67; CESCR *General Comment No 22: The Right to Sexual and Reproductive Health (Article 12 of the Covenant)* (2 May 2016) E/C12/GC/22 para 30-32; CESCR *The Obligation to Take Steps to the "Maximum of Available Resources"* para 7.

[415] See, for example, CESCR *General Comment No 15* para 7 where the Committee notes the following in relation to water resources: "Attention should be given to ensuring that disadvantaged and marginalized farmers, including women farmers, have equitable access to water and water management systems".

inequality through redistribution of resources by, for example, promoting progressive taxation.[416] The Committee's emphasis on the prioritisation of core obligations can also be seen as a dimension of the equitable use of resources, requiring States Parties to ensure that resources are first allocated to areas where the need is greatest.[417] For example, the Committee's 2020 concluding observations with respect to Ukraine express concerned regarding reductions in governmental subsidies "which disproportionately affect vulnerable groups and individuals such as women living in poverty or in rural areas".[418] The Committee recommended that the State Party assess the impact of certain fiscal policies[419] and "[i]ncrease the level of social spending, paying particular attention to disadvantaged and marginalized individuals and regions with high levels of unemployment and poverty".[420] The Committee has also affirmed the importance of equitable use of resources and prioritisation of the greatest needs in its statement on the COVID-19 pandemic, stating as follows:

> "As this pandemic and the measures taken to combat it have had a disproportionate negative impact on the most marginalized groups, States must make all efforts to mobilize the necessary resources to combat COVID-19 in the most equitable manner, in order to avoid imposing a further economic burden on these marginalized groups. Allocation of resources should prioritize the special needs of these groups".[421]

It is clear that the use and allocation of resources for the realisation of ESCRs should promote equity through addressing the greatest needs first. With reference to meeting priority needs, De Schutter explains that "*who is reached* matters, at least as much as *how much governmental spending* goes to any particular sector".[422]

The obligation to ensure effective use of resources for the realisation of ESCRs requires States Parties to optimise the use, mobilisation, and allocation of resources. Effective use includes an obligation on States Parties to eliminate corruption as it "leads to the draining of resources".[423] In General Comment 24 the Committee notes the impact of corruption, pointing out that it "undermines a State's ability to mobilize resources for the delivery of services essential for the realization of economic, social and cultural rights".[424] In addition, corruption impacts equitable access as it "leads to discriminatory access to public services

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[416] See Elson, Balakrishnan & Heintz "Public Finance, Maximum Available Resources & HR" in *HR & Public Finance* 28 where it is argued that "tax policy needs to comply with principles of non-discrimination and equality".
[417] CESCR *The Obligation to Take Steps to the "Maximum of Available Resources"* para 4; CESCR *General Comment No 3* para 10; Robertson (1994) *Human Rights Quarterly* 702.
[418] CESCR *Concluding Observations, Ukraine* (2 April 2020) E/C12/UKR/CO/7 para 4.
[419] Para 5(c).
[420] Para 5(b).
[421] CESCR *Statement on the Coronavirus Disease (COVID-19) Pandemic and ESCRs* para 14.
[422] De Schutter "Public Budget Analysis" in *The Future of ESR* 600 (emphasis in original).
[423] Uprimny, Hernández & Araújo "Bridging the Gap" in *The Future of ESR* 633.
[424] CESCR *General Comment No 24* para 20.

in favour of those able to influence authorities, including by offering bribes or resorting to political pressure".[425] The Committee has regularly expressed its concern regarding corruption in its concluding observations. In relation to Turkmenistan, the Committee expressed concern regarding high levels of corruption "which hinders the effective use of the State party's resources for the implementation of the Covenant".[426] In relation to Ukraine, the Committee recommended that the State Party "[t]ake rigorous measures to combat tax evasion"[427] and "intensify its efforts to combat corruption".[428] The Committee has also recommended that the root causes of corruption are addressed;[429] that activists and whistle-blowers are protected;[430] that the impact of corruption on ESCRs is assessed;[431] and that adequate resources are allocated for government agencies promoting good governance, transparency and the investigation of corruption cases.[432] De Schutter argues that combatting tax evasion and strengthening tax administration should be a priority "because the failure to effectively address tax evasion has regressive impacts, disproportionately affecting the poor".[433]

In addition to the abovementioned obligations, Uprimny, Hernández and Araújo argue that the emerging doctrine of the Committee imposes extraterritorial obligations in relation to "cross-border tax evasion, illicit financial flows and corruption on a global scale".[434] This is evident in, for example, the Committee's concluding observations with respect to the United Kingdom, where it expressed concern regarding "financial secrecy legislation and permissive rules on corporate tax".[435] Significantly, the Committee recognised that these measures hinder the ability to mobilise the maximum available resources for ESCRs both

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[425] CESCR *General Comment No 24* para 20. With respect to the relationship between equitable use and corruption, see, for example, CESCR *Ukraine* (2020) para 4-5.
[426] CESCR *Concluding Observations, Turkmenistan* (31 October 2018) E/C12/TKM/CO/2 para 14. See also CESCR *Concluding Observations, Central African Republic* (4 May 2018) E/C12/CAF/CO/1 para 15.
[427] CESCR *Ukraine* (2020) para 5(d).
[428] CESCR *Ukraine* (2020) para 9.
[429] See CESCR *Cabo Verde* (2018) para 14-15; CESCR *Cameroon* (2019) para 20; CESCR *Central African Republic* (2018) para 16.
[430] See CESCR *Cabo Verde* (2018) para 15; CESCR *Concluding Observations, Bulgaria* (29 March 2019) E/C.12/BGR/CO/6 para 11; CESCR *Cameroon* (2019) para 20.
[431] See CESCR *Turkmenistan* (2018) para 14-15; CESCR *Ecuador* (2019) para 23-24.
[432] See CESCR *Bulgaria* (2019) para 11; CESCR *Central African Republic* (2018) para 15-16. See also Uprimny, Hernández & Araújo "Bridging the Gap" in *The Future of ESR* 633-634 on the CESCR's treatment of corruption in its concluding observations.
[433] De Schutter "Public Budget Analysis" in *The Future of ESR* 579-580. See also UNHRC *Report of the Special Rapporteur on Extreme Poverty and Human Rights, Magdalena Sepúlveda Carmona* (22 May 2014) A/HRC/26/28 para 60.
[434] Uprimny, Hernández & Araújo "Bridging the Gap" in *The Future of ESR* 637. See CESCR *Concluding Observations, Honduras* (11 July 2016) E/C12/HND/CO/2 para 20; CESCR *Concluding Observations, Burkina Faso* (12 July 2016) E/C12/BFA/CO/1 para 10, CESCR *United Kingdom* (2016) para 16-17; CESCR *Switzerland* (2019) para 13.
[435] CESCR *United Kingdom* (2016) para 16.

for the United Kingdom and for other states.[436] The Committee recommended that the State Party "[i]ntensify its efforts […] to address global tax abuse".[437] The Committee has also made a similar recommendation in respect of cross-border tax evasion in Switzerland.[438] In relation to Liechtenstein and international cooperation in the context of maximum available resources, the Committee recommended that private foundations based in the State Party be "subject to the necessary regulations, in order to contribute to the efforts of other States parties in combating tax evasion and tax abuse schemes".[439] Elson, Balakrishnan and Heintz underscore the importance of such measures and note that the presence of tax havens and failures to prevent tax avoidance and tax evasion represent a significant loss in potential tax revenue for developing countries.[440]

Regarding effectiveness, Elson, Balakrishnan and Heintz illustrate that where the term is understood only in relation to limiting financial costs, there are other hidden costs that may not be accounted for.[441] A financially "effective" health service may, for example, require more at-home care from relatives to limit hospital expenses. In this way the ostensible financial effectiveness would obscure hidden costs disproportionately borne by women and girls compelled to take on caregiving roles.[442] It is therefore necessary to include such costs in determining the effectiveness of resource use. The Committee has, for example, recommended that Ukraine's gender budgeting initiative include "time-use surveys as a tool to measure the distribution of paid and unpaid work between women and men".[443]

Financial effectiveness should therefore not be promoted at the expense of human rights. More "effective" spending from a financial perspective does not necessarily translate to the realisation of ESCRs.[444] Effectiveness should be rather understood in terms of the ability of the relevant measures to achieve ESCRs to the greatest degree, which could include wise use of financial resources and limiting wasteful expenditure. From the perspective of Skogly's qualitative approach to resources, effective use can also be understood as ensuring effectiveness in terms of the qualitative nature of resources, not merely from a financial or economic perspective. This might mean appropriate and effective use of human

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[436] CESCR *United Kingdom* (2016) para 16.
[437] Para 17.
[438] CESCR *Switzerland* (2019) para 13. See section 5 3 1 above.
[439] CESCR *Concluding Observations, Liechtenstein* (3 July 2017) E/C12/LIE/CO/2-3 para 10.
[440] Elson, Balakrishnan & Heintz "Public Finance, Maximum Available Resources & HR" in *HR & Public Finance* 27.
[441] 23-24.
[442] 23-24.
[443] CESCR *Ukraine* (2020) para 17(b). See also ICESCR article 3.
[444] Elson, Balakrishnan & Heintz "Public Finance, Maximum Available Resources & HR" in *HR & Public Finance* 24-25.

and organisational resources or ensuring that infrastructural resources are maintained and not overburdened to allow for their continued use in the long term. For example, financial resources spent on building new facilities for healthcare may be ineffective if the same result (in terms of realisation of the right to health) could be achieved by appropriate maintenance and upgrading of existing healthcare facilities. Similarly, sustainability should be considered a dimension of effective use in relation to natural resources and the allocation of financial resources for environmental protection.[445]

Skogly's qualitative approach emphasises the role of non-financial resources as well as their quality and effectiveness in realising ESCRs, noting that taking account of this qualitative dimension will contribute to a more sustainable approach.[446] The former Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Catarina de Albuquerque affirms this qualitative approach (albeit without using the term) in her report on sustainability and the rights to water and sanitation.[447] The Special Rapporteur's report repeatedly underscores the importance of the quality of existing (non-financial) resources. She stresses that the maintenance and operation, and related funding, of existing infrastructure is critical for the sustainable realisation of the rights to water and sanitation. Installing infrastructure for accessing water, for example, constitutes a temporary measure to fulfil the State Party's obligation if it is not also effective and accompanied with appropriate measures to maintain such infrastructure and ensure sustainable access to water.[448] A qualitative approach to resources should therefore include: a careful consideration of the amount and quality of non-financial resources available to the State Party;[449] the appropriate maintenance and operation of existing infrastructure and systems;[450] and the provision of necessary funding for such maintenance and operation of any new infrastructure and systems.[451] This qualitative approach must also be applied to natural resources. Where ESCRs are directly dependent on, for example, clean air, soil and water, States Parties must invest in the necessary measures to protect and maintain the quality of these resources to a degree that is commensurate with the foundational role of these resources in supporting

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[445] See 5 6 3 below.
[446] Skogly (2012) *Human Rights Law Review* 393-420.
[447] UNHRC *Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Catarina de Albuquerque* (11 July 2013) A/HRC/24/44. This report is examined further in Chapter 6 in relation to progressive realisation and retrogression. See Chapter 6, 6 3 3 and 6 4 2.
[448] See, for example, UNHRC *Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation* (2013) A/HRC/24/44 para 4 where the Special Rapporteur notes the failure of a significant portion of hand pumps installed in sub-Saharan Africa, resulting in reduced access to water.
[449] UNHRC *Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation* (2013) A/HRC/24/44 para 53.
[450] Para 28, 42 & 66.
[451] Para 34, 58 & 63.

ESCRs. Such a sustainable and qualitative approach to resources naturally supports the effective use of natural and non-natural resources.

5 6 2 Equitable use and principles of IEL

Applying sustainable development and the principle of integration to the equitable use of resources requires the consideration of an integrated range of needs including needs related to the environment and natural resources. Failing to integrate the environment into decision-making related to resource use and allocation will lead to decisions that disproportionately and unfairly impact those who are more directly dependent on the environment including, for example, indigenous peoples; those dependent on natural water sources for their water and sanitation needs; and those whose livelihoods directly depend on the environment and natural resources. An integration of environmental considerations into decision-making could assist in ensuring that ostensibly equitable decisions with regard to resources do not in fact result in disproportionate impacts on certain groups.

With regard to environmental protection, measures to protect the environment and natural resources, such as those related to sustainable use, should be implemented in such a way as to minimise the impact on those most severely affected. For example, an adjustment of quotas or allocations of fishing licences to ensure sustainable use should consider the position of small-scale fishers and seek to mitigate detrimental impacts on ESCRs as a result of limitations on the exploitation of marine living resources.[452] The burden of measures related to sustainable use should be borne by those whose human rights will be least affected by such measures. In the example of fishing quotas, ensuring both equitable and sustainable use could therefore mean imposing greater restrictions on the licences of larger entities in the fishing industry, while ensuring that the livelihoods and rights to food of indigenous peoples and small-scale fishers are not unduly affected.

Similarly, applying the principle of prevention requires resource-related measures that will inevitably impact development activities and these measures should be implemented in such a way as to ensure the least impact on the most vulnerable. For example, in 2019 the removal of fossil fuel subsidies in Ecuador was economically jarring and had a disproportionate impact on those reliant on public transport. Any such transitions must be

[452] In relation to agricultural practices see also UNGA *Interim Report of the Special Rapporteur on Extreme Poverty and Human Rights, Olivier De Schutter: The "Just Transition" in the Economic Recovery: Eradicating Poverty within Planetary Boundaries* (7 October 2020) A/75/181/Rev1 para 36-38. The Special Rapporteur refers to the disproportionate impact of certain agricultural developments on small-scale farmers and recommends alternative measures that are both equitable and environmentally sustainable.

mindful of impacts on the poor and a gradual or tiered system of transition could lessen these impacts.[453] Such policies, including those related to a just transition away from fossil fuels, must therefore take into account any potential disproportionate impacts on the ESCRs of the most marginalised and disadvantaged.[454] Similarly, where individuals and groups are at risk of unemployment resulting from a transition to renewable energy, States Parties must ensure that new opportunities are available. For example, in its concluding observations on Estonia the Committee recommended that "the State party ensure that workers who are affected by industrial restructuring and the transition to renewable energy […] are able to make an effective and smooth transition to new occupations that enable them to maintain an adequate standard of living".[455]

Equitable resource use has significant overlap with the principles of intragenerational and intergenerational equity.[456] Intergenerational equity underscores the need for resources devoted to environmental protection for the sake of protecting the future Covenant rights of future generations.[457] Intragenerational equity suggests that resource use should consider the needs of all individuals and groups within a State Party, as well as the needs of other states.[458] The no-harm principle also seeks to ensure that neighbouring states do not bear the costs of environmental harm without any benefit.[459] The principle of CBDR could be used to address some of this inequity where states are concerned.[460] In the context of climate change, many states that bear the harshest burden of climate change impacts also have the least responsibility.[461] In such cases CBDR could be a tool to guide the equitable use of resources by imposing stronger obligations on responsible States Parties in relation to the

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[453] See K Monahan "Ecuador's fuel protests show the risks of removing fossil fuel subsidies too fast" (01-11-2019) *The Conversation* <https://theconversation.com/ecuadors-fuel-protests-show-the-risks-of-removing-fossil-fuel-subsidies-too-fast-125690> (accessed 21-04-2020). In the case of household energy costs, the Special Rapporteur on Extreme Poverty and Human Rights, Olivier De Schutter recommends social tariff schemes. See UNGA *The "Just Transition" in the Economic Recovery: Eradicating Poverty within Planetary Boundaries* (2020) A/75/181/Rev1 para 29.

[454] See, for example, CESCR *The Pledge to Leave No One Behind: The ICESCR and the 2030 Agenda* para 6-9. In relation to transport in the context of a just transition, see also UNGA *The "Just Transition" in the Economic Recovery: Eradicating Poverty within Planetary Boundaries* (2020) A/75/181/Rev1 para 39-42.

[455] CESCR *Concluding Observations, Estonia* (27 March 2019) E/C12/EST/CO/3 para 23. For further recommendations for a just transition in the employment sector, see UNGA *The "Just Transition" in the Economic Recovery: Eradicating Poverty within Planetary Boundaries* (2020) A/75/181/Rev1 para 7-12.

[456] See Chapter 4, 4 3 1 4 and 4 3 1 5 above in relation to intergenerational and intragenerational equity.

[457] See Chapter 6, 6 3 3 2 where the position of future generations is considered.

[458] The needs of other states in relation to the enjoyment of ESCRs is underscored by the obligation of international assistance and cooperation in article 2(1).

[459] See Chapter 4, 4 3 2 2 2 with regard to the no-harm principle.

[460] See Chapter 4, 4 3 4. Although the principle of CBDR has primarily found application in the climate change regime, there is no reason why the principle cannot be useful in assigning differentiated responsibilities in other areas of common concern.

[461] In relation to states that bear a disproportionate burden of climate change see, for example, CESCR *Concluding Observations, Mauritius* (5 April 2019) E/C12/MUS/CO/5 para 9-10; CESCR *Concluding Observations, Bangladesh* (18 April 2018) E/C12/BGD/CO/1 para 13-14.

provision of international assistance and cooperation. It is important to note that the obligation of international assistance and cooperation exists regardless of responsibility or culpability for any form of harm. However, incorporating a degree of responsibility under the principle of CBDR can add a degree specificity (*who* should be responsible for providing international resources) and persuasion (*why* should they be responsible for providing these resources). In the context of climate change the direct attribution of responsibility may be difficult due to the complexity of determining causation.[462]

An understanding of equitable use of resources which takes the environment into account and incorporates the principle of intragenerational equity would also require an equitable distribution of environmental benefits and impacts among peoples and states. This means that where development activities result in environmental harm, the communities whose ESCRs are impacted by that environmental harm should also be recipients of the benefits from those activities or, at the very least, compensation for harm suffered as a result. For example, local communities who bear the brunt of air pollution from coal-fired power stations which serve the broader population, should receive some form of compensation, for example, through funding for relocation or in the form of healthcare benefits to address the harm they are likely to suffer. In addition, those who benefit from the exploitation of natural resources but are geographically separate from its impacts, should bear some of the costs associated with such exploitation.[463]

Industries responsible for pollution and environmental degradation should bear the costs of environmental protection and remediation in accordance with the polluter pays principle. This would ensure provision of the necessary financial resources for protection of the environment that ESCRs depend on, and it would therefore prevent the state from bearing the cost on behalf of polluters. Mechanisms for ensuring the appropriate distribution of pollution-related costs include the creation of pollution funds, taxes on activities or goods, or increased costs to consumers of products which result in significant environmental harm. However, caution should be exercised where costs related to the polluter pays principle are imposed on ordinary citizens or consumers in relation to essential items or products

[462] The categorisation of parties according to CBDR under the UNFCCC could be of assistance where climate change is concerned. See United Nations Framework Convention on Climate Change (adopted 9 May 1992, entered into force 21 March 1994) 1771 UNTS 107 Annex I & Annex II. See also Chapter 4, 4 3 4.

[463] See, for example, sections 5 4 2 1 and 5 4 2 3 above in relation to the impacts of exploitation of natural resources by foreign corporations, often with little benefit for the host State or affected local and indigenous communities.

necessary for the enjoyment of human rights.[464] Equitable use therefore requires that state resources, which should be used equitably for the benefit of the people, are not instead used to solve environmental problems created by corporate entities for financial gain.

Equitable use of resources as described above is supported by non-discrimination and equality in the Covenant, as well as the Committee's persistent assertion of the priority of marginalised and disadvantaged individuals and communities.[465] A teleological interpretation of the Covenant that evolves appropriately in light of changing circumstances must therefore include the equitable use of natural resources as well as an obligation on States Parties to use resources to equitably distribute environmental benefits and provide protection from environmental harm.[466]

5 6 3 Effective use and principles of IEL

In accordance with sustainable development and the principle of integration, and in order for a State Party's use of resources to be effective, the environment must be considered in resource-related decisions. An approach which ignores environmental dimensions will be ineffective in the long term as it would fail to take account of the impacts of a degraded environment on ESCRs. Sustainable use of resources ensures effective use for the realisation of ESCRs over the long term. For example, in General Comment 12 in the context of the right to food, the Committee noted that "[c]are should be taken to ensure the most sustainable management and use of natural and other resources for food".[467]

The preventive principle, along with the tools of EIAs and HRIAs, can be used to ensure that long-term or permanent harm to ESCRs and the environment is avoided or, at the very least, mitigated.[468] Although conducting impact assessments often involves initial costs, in most cases undertaking these assessments would ultimately be more effective than the resources which could be required to remediate the environment or absorb the costs of harm caused where no impact assessments are conducted. Many of these costs can also be

[464] See Chapter 4, section 4 3 3. See also P Schwartz "The Polluter-Pays Principle" in L Krämer & E Orlando (eds) *Principles of Environmental Law* (2018) 260 265-268 for examples of mechanisms for the internalisation of environmental costs.
[465] See ICESCR article 2(2) & 3. See also, for example, CESCR *The Pledge to Leave No One Behind: The ICESCR and the 2030 Agenda* para 6-10. See also CESCR *General Comment No 14* para 18-27; CESCR *General Comment No 16*: *The Equal Right of Men and Women to the Enjoyment of all Economic, Social and Cultural Rights (Art 3 of the Covenant)* (11 August 2005) E/C12/2005/4; CESCR *General Comment No 20: Non-discrimination in Economic, Social and Cultural Rights (Art 2, para 2, of the International Covenant on Economic, Social and Cultural Rights)* (2 July 2009) E/C12/GC/20 para 15-35; CESCR *General Comment No 21* para 25-39.
[466] See Chapter 3, 3 3 3 2 2 for a discussion of the evolutive approach to interpretation.
[467] CESCR *General Comment No 12* para 25.
[468] See section 5 4 2 4 above in relation to HRIAs and EIAs.

borne by the proponent of the proposed activity. In some cases, prevention of environmental harm will be the most effective and responsible use of resources for States Parties. For example, the exploitation of fossil fuels for financial gain may prove ineffective for the promotion of ESCRs in the long term due to the significant contribution to climate change and the resultant impacts on Covenant rights.[469] However, this is not true for all States Parties and all circumstances. Developing or least developed states could, for example, argue that in the short term, significant gains for ESCRs from the exploitation of fossil fuels outweigh any potential risks as a result of climate change.[470] This would, however, need to be carefully justified. It would be more difficult for wealthier developed states to suggest that their contribution to climate change is justified despite the severity of future impacts. Given the possible financial benefits involved, the ineffective use of resources in such cases might only become evident when environmental risks and impacts are appropriately integrated into the decision-making process. This once again underscores the potential use of EIAs and HRIAs. Applying the precautionary principle, resource decisions affecting the environment cannot be effective if they fail to factor in all potential impacts, even where such impacts are uncertain. Environmental harm and related impacts on ESCRs require careful consideration and should be avoided where possible, particularly where the potential risk outweighs the short-term gain in relation to ESCRs. This is especially important where permanent and irreversible environmental harm is concerned.

As noted above, the effective use of resources requires measures to address corruption.[471] Taking the environment into account, the effective use of resources should include measures to address impacts on the environment, particularly if a healthy environment is seen as a resource which positively contributes to the enjoyment of ESCRs. Effective use should therefore require measures for environmental protection and imposing liability for environmental harm. This includes mechanisms to hold polluters accountable for environmental harm to ensure that public resources are not diverted from ESCRs to address damage caused by the polluting conduct of private parties.[472] One means of addressing this is to require financial provisioning for future remediation of environmental harm from those

[469] In relation to the impacts of climate change on Covenant rights see, for example, CESCR *CC and the ICESCR* para 4; UNHRC *Report of the Special Rapporteur on Extreme Poverty and Human Rights: Climate Change and Poverty* (17 July 2019) A/HRC/41/39 para 3-15. See also Chapter 2, 2 1.
[470] It is necessary to point out, however, that such arguments are becoming increasingly difficult for developing states to make as alternative and renewable energy sources become more affordable and accessible.
[471] Section 5 6 1 above.
[472] See the discussion of the polluter pays principle at Chapter 4, 4 3 3.

who have been licensed to undertake activities likely to cause environmental harm.[473] Given the far-reaching extent of the potential harm to ESCRs resulting from pollution and environmental degradation, the effective use of resources must include measures to prevent corruption and mismanagement in relation to the environment and natural resources, including appropriate legislation, environmental management, licensing fees for natural resource exploitation, and enforcement of environmental laws.

In conclusion, effective use is understood to include measures to combat tax evasion, the prevention of corruption, the protection of whistle-blowers and the promotion of good governance. If environmental considerations are appropriately integrated within the concept of effective use, it should also include the prevention of mismanagement of natural resources and the environment, the protection of environmental defenders, and the promotion of sound environmental governance. Consistent with the principles of interpretation in Chapter 3, this greening of the obligation of effective use is an appropriate evolution of States Parties' obligation to use the maximum of available resources in light of present-day circumstances. Appropriate environmental protection and management as well as use of natural resources should therefore be required of States Parties to the Covenant to the extent that the realisation of ESCRs is threatened by related environmental degradation and climate change.

5 7 Conclusion

This chapter began with an examination of state sovereignty and the right of self-determination in article 1 of the Covenant. As a point of departure, States Parties are permitted to use and dispose of their natural wealth and resources as they see fit. However, interpreted systematically in light of States Parties' obligations in the Covenant, this right is not unfettered.[474] States Parties are free to use and dispose of their natural wealth and resources to the extent that it does not prevent them, or other States Parties, from meeting their obligations under the Covenant. The right to self-determination must therefore be interpreted to include an obligation on States Parties to use natural resources responsibly so as to avoid harm to natural resources or the environment that will, in turn, affect the realisation of ESCRs.

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[473] In the South African context, for example, those issued within permits for mining activities are required to provide finances for remediation and decommissioning prior to the commencement of mining activities. At the point that the mining operation ceases, those funds can be used to address any environmental damage caused by the permit holders. See sections 46 and 89 of the Mineral and Petroleum Resources Development Act 28 of 2002. Of course, such measures need to take into account the irreversible nature of much environmental harm, and should ensure that the funds provided are proportionate to the risks involved.

[474] See Chapter 3, 3 3 2 3 and 3 3 4 3 in relation to contextual and systematic interpretation.

The integration of environmental considerations within the scope of "maximum available resources" in article 2(1) is necessary in order to avoid adverse impacts on ESCRs as a result of environmental degradation and climate change. As this chapter has shown, this requires a broad view of resources which includes not only a range of resource types, but also an appreciation of their qualitative dimension. In particular, natural resources must be considered an integral part of the resources available to States Parties, both in terms of the revenue that can be generated from their exploitation, as well as through the contribution they make to ESCRs as part of functioning ecosystems and a healthy environment. Financial, administrative, technological, human and other resources (from domestic, international, public and private sources) will be necessary for the protection of the environment. To the extent that the environment needs to be protected for the realisation of ESCRs, these resources should be devoted to such environmental protection in accordance with article 2(1).

With regards to the availability of resources, it has been proposed that the principles of IEL such as sustainable use should serve to exclude certain resources from the pool of available resources. In addition, where resource use or the exploitation of natural resources will result in significant harm to the environment and ESCRs, those resources could be deemed unavailable for the purposes of article 2(1). Where exploitation of natural resources is undertaken, there are significant risks of harm to human rights. EIAs and HRIAs are therefore important tools to assess risks and impacts, and to guide decision-making. Natural resources should also be viewed qualitatively in respect of their contribution to a healthy environment conducive to the enjoyment of ESCRs, regardless of their economic value.

In relation to the concept of "maximum" resources, an integration of environmental considerations underscores the fact that, where natural resources are concerned, unlimited exploitation and consumption is not in the interests of Covenant rights. In order to ensure the continued realisation of ESCRs over the long term, and in accordance with intergenerational equity, limits to the use of resources must be imposed. The environmental determinants of ESCRs must also be "maximised" through appropriate measures in order to enhance their inherent qualitative value in supporting the realisation of ESCRs.

Under the Covenant, resources must be used equitably and effectively. From an environmental perspective, equitable use demands a fair distribution of environmental benefits and burdens, particularly where natural resource exploitation is concerned. Where measures to protect the environment may affect certain ESCRs, these measures should be implemented in such a way that the most vulnerable and disadvantaged are not

disproportionately impacted. Equitable use of resources also requires a consideration of the needs of future generations as well as the equitable distribution of resources between states in respect of states' responsibilities for environmental harm.

Finally, an understanding of the effective use of resources that integrates environmental dimensions must include long-term sustainability. Short-term resource use that benefits ESCRs, but ultimately causes significant harm to the environment on which those ESCRs depend, cannot be deemed effective. Effective use also requires the appropriate use of EIAs and HRIAs prior to making relevant decisions to ensure that resources are not squandered on projects that promise gains for ESCRs but ultimately result in harm to Covenant rights. Resource use can only be effective where decisions regarding resources are not limited to financial concerns, but consider all relevant risks and impacts including those related to natural resources and the environment. Measures to prevent corruption and protect state resources should also be applied to natural resources and the environment. This can be done through, for example, measures to prevent the mismanagement of environmental resources and appropriate enforcement of relevant environmental laws including the application of the polluter pays principle.

In order for the Covenant to adapt appropriately to present-day circumstances and be effective in light of increasingly severe and urgent environmental challenges, the obligation on States Parties to use the maximum of available resources for the realisation of ESCRs must integrate environmental considerations. Such an effective and evolutive interpretation of article 2(1) requires States Parties to actively consider the inherent value of natural resources beyond their potential economic use and to dedicate resources to appropriate environmental management and protection where ESCRs are threatened by environmental harm.[475] A failure to systematically integrate environmental considerations within the meaning of maximum available resources will result in the numerous environmental threats to ESCRs becoming invisible and thus being overlooked. The obligation on States Parties to use the maximum of available resources must therefore incorporate relevant environmental considerations in order to ensure the continued progressive realisation of ESCRs. The following chapter continues to explore the greening of article 2(1) and examines the relevance of environmental considerations for the interpretation of core obligations, progressive realisation and non-retrogression.

[475] The interpretive principle of effectiveness and the evolutive approach are discussed at Chapter 3, 3 3 3 2.

CHAPTER 6:
CORE OBLIGATIONS, PROGRESSIVE REALISATION AND NON-RETROGRESSION

6 1 Introduction

This chapter continues to examine aspects of States Parties' obligations in article 2(1) of the Covenant with the aim of integrating environmental considerations in their interpretation. The chapter investigates the concepts of core obligations, progressive realisation, and non-retrogression. These three aspects of States Parties' obligations are considered together as they are interrelated. Core obligations can be seen as the baseline or foundation of ESCRs, while progressive realisation proceeds from this foundation and seeks to achieve the "full realization" of Covenant rights.[1] Where progressive realisation advances the level of attainment of ESCRs, the corollary duty to avoid retrogression requires that States Parties sustain any progress made towards full realisation, and avoid any backwards steps in that regard. The aim of this chapter is to explore how these interrelated aspects of States Parties' obligations can be interpreted so as to take environmental considerations into account.

The chapter begins with an examination of the notion of core obligations and the current approaches of the Committee and scholars to this concept.[2] This is followed by an analysis of the environmental dimensions of core obligations primarily with reference to the principles of IEL. In this regard the urgency and priority afforded to core obligations is important and would also apply to any environmental dimensions identified.

Progressive realisation is then considered.[3] As is noted below, the obligation of progressive realisation requires a broad range of measures from States Parties. This chapter does not analyse all of these in detail. The focus is on the long-term measures required for progressive realisation as well as the forward-looking perspective required from States Parties in order to adopt plans and strategies for the realisation of ESCRs. In light of the long-term nature of environmental impacts, this future-oriented perspective is particularly important for greening the obligation of progressive realisation. In the context of progressive realisation and the abovementioned long-term perspective, the chapter also examines the position of future generations under the Covenant. This includes an investigation of the possibilities for recognising future generations' rights as well as the possible scope of States

[1] International Covenant on Economic, Social and Cultural Rights (adopted 16 December 1966, entered into force 3 January 1976) 993 UNTS 3 article 2(1).
[2] See 6 2 below.
[3] See 6 3 below.

Parties' obligations towards future generations under the Covenant. The forward-looking dimension of progressive realisation and the position of future generations are then considered in relation to the principles of IEL.

Finally, the chapter examines the obligation on States Parties to avoid retrogressive measures, including the limited circumstances where States Parties might justify such measures.[4] The chapter concludes with an integration of environmental considerations within the obligation of non-retrogression. This is done with reference to the principles of IEL and includes an investigation of the relationship between sustainability and retrogression.

6 2 Core obligations

6 2 1 Current interpretation of core obligations

6 2 1 1 Introduction

The concept of minimum core obligations was introduced by the Committee in General Comment 3.[5] The description provided there has been characterised as the "canonical formulation" of the minimum core.[6] The Committee states the following:

> "On the basis of the extensive experience gained by the Committee, as well as by the body that preceded it, over a period of more than a decade of examining States parties' reports the Committee is of the view that a minimum core obligation to ensure the satisfaction of, at the very least, minimum essential levels of each of the rights is incumbent upon every State party. Thus, for example, a State party in which any significant number of individuals is deprived of essential foodstuffs, of essential primary health care, of basic shelter and housing, or of the most basic forms of education is, prima facie, failing to discharge its obligations under the Covenant. If the Covenant were to be read in such a way as not to establish such a minimum core obligation, it would be largely deprived of its raison d'être".[7]

Minimum core obligations are intrinsically linked to the requirement of progressive realisation in article 2(1). While progressive realisation allows States Parties at different levels of development the flexibility to meet Covenant obligations according to their resources and capabilities, minimum core obligations ensure that this flexibility is not exploited to the extent that ESCRs become meaningless.[8] The concept of core obligations can be understood as a response to the "potential for self-serving invocations of the doctrine of progressive realization as a cover for present non-compliance".[9] As the Committee notes, an

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[4] See 6 4 below.
[5] CESCR *General Comment No 3* para 10.
[6] J Tasioulas *Minimum Core Obligations: Human Rights in the Here and Now* (2017) 9.
[7] CESCR *General Comment No 3* para 10.
[8] CESCR *Social Protection Floors* para 10; Sepúlveda *Nature of Obligations under the ICESCR* 367; Odello & Seatzu *The UN Committee on ESCR* 21.
[9] Tasioulas *Minimum Core Obligations* 15.

interpretation of the Covenant that excludes minimum core obligations would deprive it of its "raison d'être".[10]

Tasioulas proposes two interpretations of the nature of the relationship between the minimum core and progressive realisation. The minimum core doctrine can be understood as a component of progressive realisation that sets out the first steps that should be taken in order to progressively realise ESCRs. On the other hand, the minimum core can also be understood as an independent threshold outside of progressive realisation, emphasising that core obligations should not be subject to progressive realisation. The minimum core can therefore be seen either as "part of the doctrine of progressive realization" or "as limiting its domain of operation".[11] Tasioulas argues that the latter approach is most appropriate given the immediate nature of minimum core obligations. This is consistent with the Committee's repeated characterisation of core obligations as immediate obligations.[12] It is important to note that immediate obligations also exist with respect to progressive realisation, most notably the obligation to "take steps" towards the progressive realisation of ESCRs.[13] The Covenant requires States Parties to continue to take "deliberate, concrete and targeted" steps [14] towards achieving progressively the full realisation of Covenant rights "as expeditiously and effectively as possible".[15] Core obligations and progressive realisation therefore can, and should, be pursued simultaneously by States Parties, while affording the appropriate urgency and priority to the minimum core.

It is necessary to clarify the terminology used in relation to what has been referred as "the minimum core doctrine".[16] In its initial formulation in General Comment 3, the terms "minimum core obligation" and "minimum essential levels" were used. Minimum essential levels refer to the substantive minimum content of the relevant ESCRs which could be

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[10] CESCR *General Comment No 3* para 10. On the justification of this interpretation see, for example, L Forman, L Caraoshi, AR Chapman & E Lamprea "Conceptualising Minimum Core Obligations under the Right to Health: How Should We Define and Implement the 'Morality of the Depths'" (2016) *International Journal of HR* 531 542; Tasioulas *Minimum Core Obligations* 15.

[11] Tasioulas *Minimum Core Obligations* 14.

[12] See CESCR *General Comment No 13* para 43; CESCR *General Comment No 14* para 30; CESCR *General Comment No 15* para 37; CESCR *General Comment No 17* para 25 & 39; CESCR *General Comment No 21* para 67 & 55; CESCR *General Comment No 23* para 52. However, on at least one occasion the Committee has, confusingly, referred to the progressive realisation of core obligations. See CESCR *Ukraine* (2014) para 15. The immediate nature of core obligations is discussed further below at 6 2 1 2.

[13] See, for example, CESCR *General Comment No 15* para 17; CESCR *General Comment No 14* para 30; CESCR *General Comment No 19* para 40.

[14] CESCR *General Comment No 3* para 2.

[15] CESCR *General Comment No 3* para 9; CESCR *Poverty and the International Covenant on Economic, Social and Cultural Rights* (10 May 2001) E/C12/2001/10 para 18; CESCR *Social Protection Floors* para 10. See also M Ssenyonjo "Reflections on State Obligations with Respect to Economic, Social and Cultural Rights in International Human Rights Law" (2011) 15 *International Journal of HR* 969 978; Sepúlveda *Nature of Obligations under the ICESCR* 369; Tasioulas *Minimum Core Obligations* 29.

[16] See, for example, Tasioulas *Minimum Core Obligations*.

referred to as "the nature or essence of a right, that is, the essential element or elements without which it loses its substantive significance as a human right".[17] The terminology used by the Committee to refer to this substantive essence of ESCRs includes "minimum essential levels",[18] "minimum core content"[19] and, less frequently used, "core content".[20] This minimum core content is the substance of the ESCRs that core obligations must realise. The Committee therefore describes core obligations with reference to the minimum essential levels or core content of the relevant right.[21]

While the terminology initially used by the Committee referred to "minimum core obligations", the Committee has shifted its language to refer to "core obligations",[22] with a handful of exceptions including its 2020 statement and general comment.[23] With regard to the earlier emphasis on "minimum", Chapman and Russell note the concern of human rights

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[17] A Chapman & S Russell "Introduction" in A Chapman & S Russell (eds) *Core Obligations: Building a Framework for Economic, Social and Cultural Rights* (2002) 1 9.

[18] CESCR *General Comment No 3* para 10; CESCR *General Comment No 12* para 17; CESCR *General Comment No 15* para 44(c) & 56; CESCR *General Comment No 19* para 59; CESCR *General Comment No 22* para 49; CESCR *General Comment No 23* para 65; CESCR *Poverty and the ICESCR* (10 May 2001) E/C12/2001/10 para 15; CESCR *Human Rights and Intellectual Property* (14 December 2001) E/C12/2001/15 para 12; CESCR *The World Food Crisis* para 8; CESCR *Netherlands* (2017) para 39; CESCR *Concluding Observations, Indonesia* (19 June 2014) E/C12/IDN/CO/1 para 12; CESCR *Concluding Observations, Yemen* (22 June 2011) E/C12/YEM/CO/2 para 4; CESCR *Lebanon* (2016) para 12; CESCR *Sweden* (2016) para 20.

[19] CESCR *An Evaluation of the Obligation to Take Steps to the "Maximum of Available Resources" under an Optional Protocol to the Covenant* (10 May 2007) E/C12/2007/1 para 10; CESCR *Public Debt, Austerity Measures and the ICESCR* para 4; CESCR *Argentina* (2018) para 6; CESCR *Cabo Verde* (2018) para 13; CESCR *Slovenia* (2014) para 8; CESCR *Concluding Observations, Sudan* (27 October 2015) E/C12/SDN/CO/2 para 18; CESCR *Concluding Observations, Bulgaria* (29 March 2019) E/C12/BGR/CO/6 para 9; CESCR *Ukraine* (2014) para 5; CESCR *Concluding Observations, Iceland* (11 December 2012) E/C12/ISL/CO/4 para 6; CESCR *Canada* (2016) para 10; CESCR *Ecuador* (2019) para 6(d); CESCR *Concluding Observations, Ireland* (8 July 2015) E/C12/IRL/CO/3 para 11; CESCR *Concluding Observations, Spain* (6 June 2012) E/C12/ESP/CO/5 para 8.

[20] CESCR *General Comment No 8: The Relationship between Economic Sanctions and Respect for Economic, Social and Cultural Rights* (12 December 1997) E/C12/1997/8 para 7; CESCR *General Comment No 12* para 8; CESCR *The World Food Crisis* para 8; CESCR *Iceland* (2012) para 6; CESCR *Spain* (2018) para 14; CESCR *Concluding Observations, United Kingdom of Great Britain and Northern Ireland* (14 July 2016) E/C12/GBR/CO/6 para 19; CESCR *Concluding Observations, Angola* (15 July 2016) E/C12/AGO/CO/4-5 para 8.

[21] CESCR *General Comment No 3* para 10; CESCR *General Comment No 14* para 43; CESCR *General Comment No 15* para 37; CESCR *General Comment No 19* para 59-60; CESCR *General Comment No 21* para 67; CESCR *General Comment No 23* para 65; CESCR *Poverty and the ICESCR* (10 May 2001) E/C12/2001/10 para 15; CESCR *Sweden* (2016) para 20; CESCR *Concluding Observations, The Netherlands* (9 December 2010) E/C12/NDL/CO/4-5 para 25(b).

[22] CESCR *General Comment No 12* para 6; CESCR *General Comment No 14* para 43, 45, 47 & 48; CESCR *General Comment No 15* para 6, 37, 38, 40 & 42; CESCR *General Comment No 17* para 25, 35, 39, 41 & 42; CESCR *General Comment No 18* para 30 & 31; CESCR *General Comment No 19* para 59, 61 & 65; CESCR *General Comment No 21* para 55 & 67; CESCR *General Comment No 22* para 49; CESCR *General Comment No 23* para 50, 52, 65 & 78; CESCR *General Comment No 25* para 51 & 52. CESCR *Poverty and the ICESCR* (10 May 2001) E/C12/2001/10 para 15-18; CESCR *Human Rights and Intellectual Property* (14 December 2001) E/C12/2001/15 para 11-13; CESCR *An Evaluation of the Obligation to Take Steps to the "Maximum of Available Resources"* para 6; CESCR *Social Protection Floors* para 10; CESCR *Duties of States towards Refugees and Migrants under the ICESCR* para 9, 10 & 18.

[23] CESCR *General Comment No 3* para 10; CESCR *Statement on the Coronavirus Disease (COVID-19) Pandemic and ESCRs* para 12; CESCR *General Comment No 19* para 60; CESCR *General Comment No 25* para 21 & 24.

activists that "the identification of minimum core content will reveal to State parties how little they have to do in order to be in compliance with their obligations, and that States will do that minimum and nothing more".[24] Forman, Caraoshi, Chapman and Lamprea similarly note the contrast between the notion of core or essence and minimum, noting that "that which is most essential and therefore important, seems to conflict with that which is minimum, by definition, the very least a state should do".[25] They suggest that these considerations are likely have triggered the Committee's move away the term "minimum core obligations" to its more widely used "core obligations". Whether or not this is the case, it seems clear from the Committee's work that it tends towards the use of the term "core obligations".[26]

6 2 1 2 The nature of core obligations

Regarding the nature of core obligations, it is useful to note the distinction between obligations of conduct and obligations of result.[27] In General Comment 3 the Committee notes that Covenant obligations include both types of obligations.[28] The Committee also identifies the obligation of progressive realisation of ESCRs as "[t]he principal obligation of result reflected in article 2(1)",[29] but it does not similarly specify what type of obligation minimum core obligations are. It therefore remains unclear "whether core obligations require a fixed set of outcomes or simply action reasonably capable of achieving such outcomes".[30] In some cases, the Committee describes core obligations with reference to minimum essential levels or core content, indicating obligations of result. The Committee has, for example, required the provision of minimum essential levels of food,[31] water[32] and social security.[33] There are, however, some core obligations that would fall within the realm of

[24] Chapman & Russell "Introduction" in *Core Obligations: Building a Framework for ESCR* 9. The authors also point out, however, that if these "minimum" obligations were actually fulfilled by all States Parties to the Covenant, "that would in many cases represent progress".
[25] Forman, Caraoshi, Chapman & Lamprea (2016) *International Journal of HR* 536.
[26] This dissertation uses the terms "core obligations" and "minimum core obligations" interchangeably.
[27] See "The Maastricht Guidelines on Violations of Economic, Social and Cultural Rights" (1998) 20 *HR Quarterly* 691–704, para 7 in relation to the distinction between obligations of conduct and result. See also Sepúlveda *Nature of Obligations under the ICESCR* 184-196; Tasioulas *Minimum Core Obligations* 21.
[28] CESCR *General Comment No 3* para 1.
[29] CESCR *General Comment No 3* para 9.
[30] Forman, Caraoshi, Chapman & Lamprea (2016) *International Journal of HR* 537.
[31] CESCR *General Comment No 12* para 6, 14 & 17; CESCR *General Comment No 14* para 43(b); CESCR *The World Food Crisis* para 7-8; CESCR *Duties of States towards Refugees and Migrants under the ICESCR* para 9; CESCR *Concluding Observations, Benin* (9 June 2008) E/C12/BEN/CO/2 para 44; CESCR *Concluding Observations, Kenya* (1 December 2008) E/C12/KEN/CO/1 para 28; CESCR *Concluding Observations, Angola* (1 December 2008) E/C12/AGO/CO/3 para 29; CESCR *Sudan* (2015) para 50.
[32] CESCR *General Comment No 15* para 37. See also para 44(c) & 56.
[33] CESCR *General Comment No 19* para 59; CESCR *Social Protection Floors* para 8; CESCR *Liechtenstein* (2017) para 25; CESCR *Uruguay* (2017) para 30; CESCR *Concluding Observations, Honduras* (11 July 2016) E/C12/HND/CO/2 para 35; CESCR *Sweden* (2016) para 20; CESCR *Iceland* (2012) para 13.

obligations of conduct, such as the obligation to monitor the realisation of the rights to water[34] and social security.[35] In the absence of greater clarity from the Committee, it must be accepted that core obligations can be both obligations of result and obligations of conduct. Sepúlveda argues that the distinction has various drawbacks and proposes viewing Covenant obligations as a hybrid of both obligations of conduct and result.[36] For the purposes of this chapter it is sufficient to note that although the minimum core of ESCRs is often linked to specific minimum levels or entitlements (or results), this is not always the case. The core content of ESCRs is therefore not synonymous with minimum essential levels, but can also refer to the obligations of conduct related to the minimum core.

States Parties are required to prioritise core obligations above non-core obligations. As General Comment 3 explains, a failure to meet core obligations on the basis of a lack of available resources must be justified by demonstrating that "every effort has been made to use all resources that are at its disposition in an effort to satisfy, as a matter of priority, those minimum obligations".[37] Chapman and Russell argue that this prioritisation is a question of timing rather than "some sort of hierarchy according to relative worth".[38] States Parties are required to meet their core obligations first. However, this does not mean that meeting core obligations is a prerequisite for taking steps in relation to non-core obligations. Where core obligations can be simultaneously pursued alongside medium- and long-term measures towards progressive realisation, this must be done.

Tasioulas describes the minimum core doctrine as providing guidance on how to prioritise compliance with a range of human rights obligations.[39] Core obligations can also assist in determining non-compliance with the Covenant.[40] The Committee has reiterated the priority of core obligations on a number of occasions,[41] including in its statement on the COVID-19 pandemic where the Committee notes that "[i]n responding to the pandemic, the inherent dignity of all people must be respected and protected, and minimum core obligations imposed by the Covenant should be prioritized".[42]

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[34] CESCR *General Comment No 15* para 37(g).
[35] CESCR *General Comment No 19* para 59(f).
[36] Sepúlveda *Nature of Obligations under the ICESCR* 184-196.
[37] CESCR *General Comment No 3* para 10.
[38] Chapman & Russell "Introduction" in *Core Obligations: Building a Framework for ESCR* 9.
[39] Tasioulas *Minimum Core Obligations* 14.
[40] See Odello & Seatzu *The UN Committee on ESCR* 20.
[41] CESCR *Duties of States towards Refugees and Migrants under the ICESCR* para 10; CESCR *General Comment No 15* para 6; CESCR *General Comment No 17* para 41; CESCR *General Comment No 19* para 60; CESCR *General Comment No 25* para 51.
[42] CESCR *Statement on the Coronavirus Disease (COVID-19) Pandemic and ESCRs* para 12.

The priority of core obligations is also evident in the Committee's description of these obligations as being of "immediate effect".[43] Tasioulas emphasises immediacy as a primary characteristic of the minimum core doctrine and argues that it "specifies a ground floor of immediate compliance with Covenant rights that binds all states".[44] This means that core obligations must not only be met *first*, but they should also be met *immediately*. The immediacy of core obligations indicates that these obligations are not subject to progressive realisation. The Committee's position on this is, however, not entirely consistent.

Despite references to a number of core obligations being of immediate effect,[45] the Committee does not consistently refer to this immediacy in its general comments. A number of general comments describe core obligations and immediate obligations separately and do not explicitly describe core obligations as being of immediate effect.[46] In addition to this, the Committee has, on at least one occasion, referred to the progressive realisation of core obligations.[47] The latter reference appears to be an anomaly in the Committee's work. Whether or not all core obligations are considered immediate obligations, it is clear that they must be prioritised and addressed before non-core obligations are pursued. Where such core obligations are not immediately met States Parties should, at the very least, be expected to provide convincing justification for this failure.[48] It is important to reiterate that, in many instances, it is possible (and indeed necessary) for States Parties to pursue plans and policies for long-term progressive realisation while simultaneously attending to their core obligations. The immediacy of core obligations does not preclude States Parties from taking steps towards progressive realisation where this can be done without impeding realisation of the minimum core.

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[43] CESCR *General Comment No 13* para 43; CESCR *General Comment No 14* para 30; CESCR *General Comment No 15* para 37; CESCR *General Comment No 17* para 25 & 39; CESCR *General Comment No 21* para 67 & 55; CESCR *General Comment No 23* para 52; CESCR *Sweden* (2016) para 20; CESCR *Concluding Observations, Japan* (10 June 2013) E/C12/JPN/CO/3 para 7; CESCR *Concluding Observations, Zambia* (23 June 2005) E/C12/1/Add106 para 10.

[44] Tasioulas *Minimum Core Obligations* 15. See also 12-14 where the author discusses immediacy as a distinguishing feature of the minimum core doctrine.

[45] CESCR *General Comment No 13* para 43; CESCR *General Comment No 15* para 37; CESCR *General Comment No 17* para 25 & 39; CESCR *General Comment No 21* para 67 & 55; CESCR *General Comment No 23* para 52.

[46] See, for example, CESCR *General Comment No 13* para 43 & 57; CESCR *General Comment No 14* para 30 & 43; CESCR *General Comment No 19* para 40 & 59.

[47] See CESCR *Ukraine* (2014) para 15. With reference to social security, the Committee recommends that "[t]he State party should take measures to progressively bring its State social standards into line with its core obligations under articles 7, 9 and 11 of the Covenant".

[48] CESCR *General Comment No 3* para 10 states that "[i]n order for a State party to be able to attribute its failure to meet at least its minimum core obligations to a lack of available resources it must demonstrate that every effort has been made to use all resources that are at its disposition in an effort to satisfy, as a matter of priority, those minimum obligations".

The Committee's emphasis on international assistance and cooperation for the fulfilment of core obligations further underscores their priority.[49] While all obligations under the Covenant require a degree of international assistance and cooperation in line with article 2(1), the Committee has stressed that "it is particularly incumbent on States parties, and other actors in a position to assist, to provide international assistance and cooperation, especially economic and technical which enables developing countries to fulfil their core obligations".[50] The Committee appreciates that, although meeting core obligations is a more attainable minimum for certain countries, many developing and least developed states will require assistance and cooperation to ensure that those same obligations are met worldwide.[51] This also places an obligation on States Parties to actively seek assistance to meet their core obligations where they do not have the resources to do so themselves.[52] This international assistance and cooperation extends beyond the provision of resources. For example, in its 2018 concluding observations in relation to Germany, the Committee has recommended that the State Party exercise its leverage with international financial institutions to ensure that loan conditionalities do not lead to the violation of core obligations.[53]

As a result of the priority of minimum core obligations, departure from these obligations is not permitted except in the strictest of circumstances.[54] As the Committee established in General Comment 3, any State Party relying on resource constraints for a failure to meet its minimum core obligations "must demonstrate that every effort has been made to use all resources that are at its disposition in an effort to satisfy, as a matter of priority, those minimum obligations".[55] In this regard the Committee has indicated in its concluding observations that where there is sufficient economic growth to allow a State Party to meet its minimum core obligations, this must be done immediately.[56] In addition, the Committee

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[49] CESCR *General Comment No 8* para 7; CESCR *General Comment No 14* para 45; CESCR *General Comment No 15* para 38; CESCR *General Comment No 17* para 40; CESCR *General Comment No 19* para 61; CESCR *General Comment No 25* para 51; CESCR *Poverty and the ICESCR* (10 May 2001) E/C12/2001/10 para 16-18; CESCR *Human Rights and Intellectual Property* (14 December 2001) E/C12/2001/15 para 12-13; CESCR *Duties of States towards Refugees and Migrants under the ICESCR* para 18.

[50] CESCR *General Comment No 15* para 38. See also similar wording in CESCR *General Comment No 14* para 45; CESCR *General Comment No 17* para 40; CESCR *General Comment No 19* para 61.

[51] See K Young "The Minimum Core of Economic and Social Rights: A Concept in Search of Content" (2008) 33 *Yale Journal of International Law* 113 122-123 in relation to the minimum core and progressive redistribution of resources.

[52] Odello & Seatzu *The UN Committee on ESCR* 20-21.

[53] CESCR *Germany* (2018) para 17.

[54] See CESCR *General Comment No 3* para 10.

[55] CESCR *General Comment No 3* para 10. See also CESCR *An Evaluation of the Obligation to Take Steps to the "Maximum of Available Resources"* para 6.

[56] CESCR *Concluding Observations, India* (8 August 2008) E/C12/IND/CO/5 para 20 & 45.

has recommended that measures be taken to ensure that debt servicing does not reduce the public budget to the extent that minimum core obligations cannot be met.[57] It is also important to note that a State Party cannot restrict minimum core obligations on the basis of nationality or legal status.[58] The Committee has held that "[t]he essential minimum content of each right should be preserved in all circumstances and the corresponding duties extended to all people under the effective control of the State, without exception".[59]

The justification of retrogressive measures and limitations under article 4 of the Covenant both require compliance with minimum core obligations.[60] In relation to retrogressive measures, the Committee does provide for retrogression in certain circumstances and with a heavy burden of justification on States Parties.[61] It is clear, however, that retrogressive measures cannot be justified if they are incompatible with the State Party's core obligations.[62] Minimum core obligations thus serve as a baseline below which States Parties are not permitted to regress.

Limitations to the Covenant are provided for in article 4 and these are only permitted where they are "compatible with the nature of these rights and solely for the purpose of promoting the general welfare in a democratic society".[63] Müller argues that any limitation of minimum core obligations would go against the nature of the rights in the Covenant, particularly given the Committee's rationale for minimum core obligations in General Comment 3.[64] If a failure to establish minimum core obligations would deprive the Covenant of its "raison d'être", then a limitation of those core obligations would be considered incompatible with the nature of ESCRs and therefore impermissible.[65] Müller notes that, particularly in relation to subsistence rights, "it seems to be hardly ever possible to limit the minimum core without touching upon the very nature of the rights in question".[66] While a failure to meet minimum core obligations may technically be justified by a State Party with

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[57] CESCR *Lebanon* (2016) para 12-13.
[58] CESCR *Duties of States towards Refugees and Migrants under the ICESCR* para 9.
[59] CESCR *Duties of States towards Refugees and Migrants under the ICESCR* para 9.
[60] A Müller "Limitations to and Derogations from Economic, Social and Cultural Rights" (2009) 9 *Human Rights Law Review* 557 589. See 6 4 below.
[61] CESCR *General Comment No 23* para 52; CESCR *An Evaluation of the Obligation to Take Steps to the "Maximum of Available Resources"* para 10; CESCR *Public Debt, Austerity Measures and the ICESCR* para 4. Retrogressive measures are discussed further at 6 4 below.
[62] CESCR *General Comment No 14* para 48; CESCR *General Comment No 15* para 42; CESCR *General Comment No 17* para 42; CESCR *General Comment No 19* para 64; CESCR *General Comment No 23* para 52 & 78; CESCR *General Comment No 25* para 24. See also Müller (2009) *HR Law Review* 581.
[63] ICESCR article 4.
[64] Müller (2009) *HR Law Review* 581; CESCR *General Comment No 3* para 10.
[65] Müller (2009) *HR Law Review* 581.
[66] 583. See also 588-589.

reference to a lack of available resources,[67] it is evident that this would require particularly severe constraints and extreme circumstances following every effort by the State Party to mobilise and secure domestic and international resources to meet its core obligations.[68]

6 2 1 3 Determining the content of core obligations

The content of core obligations has often been described by the Committee with reference to the minimum core content or minimum essential level of Covenant rights. As noted above, the core content of ESCRs can refer to the specific minimum essential levels or thresholds related to ESCRs. However, minimum core content can also refer to the obligations of conduct associated with individual ESCRs. In some cases the Committee also refers to a "social protection floor" which it considers akin to minimum core content.[69] For example, in its concluding observations in relation to Ireland, the Committee recommended that the State Party "identify the minimum core content of the Covenant rights or a social protection floor and ensure the protection of this core content at all times".[70] In its statement on social protection floors the Committee also describes "the concept of social protection floors as a core obligation".[71] The precise nature of the relationship between social protection floors and minimum core content requires clarification.

In order for States Parties to meet minimum core obligations, it is essential to establish the content of these obligations. Whether or not this minimum core content is relative (i.e. country-specific) or universal is a subject of debate.[72] In some instances the Committee has directed individual States Parties to determine or identify the minimum core content of ESCRs, suggesting that there is a relative dimension to this content.[73] The Committee's general comments provide a degree of clarity regarding the nature of the core obligations, however, these are not explicit with regard to substantive and quantitative minimum levels.[74]

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[67] CESCR *General Comment No 3* para 10.
[68] Müller (2009) *HR Law Review* 588; Chapman & Russell "Introduction" in *Core Obligations: Building a Framework for ESCR* 10.
[69] CESCR *Social Protection Floors;* CESCR *Iceland* (2012) para 6; CESCR *Ireland* (2015) para 11.
[70] CESCR *Ireland* (2015) para 11.
[71] CESCR *Social Protection Floors* para 10.
[72] Forman, Caraoshi, Chapman & Lamprea (2016) *International Journal of HR* 540; Tasioulas *Minimum Core Obligations* 23-24; Young (2008) *Yale Journal of International Law* 114-115.
[73] CESCR *Iceland* (2012) para 6; CESCR *Concluding Observations, Italy* (28 October 2015) E/C12/ITA/CO/5 para 45; CESCR *Ireland* (2015) para 11.
[74] See CESCR *General Comment No 12* para 6 & 8; CESCR *General Comment No 13* para 57; CESCR *General Comment No 14* para 43; CESCR *General Comment No 15* para 37; CESCR *General Comment No 17* para 39; CESCR *General Comment No 18* para 31; CESCR *General Comment No 19* para 59; CESCR *General Comment No 21* para 55; CESCR *General Comment No 22* para 49; CESCR *General Comment No 23* para 65; CESCR *General Comment No 25* para 52.

In the context of certain rights, the Committee has been more direct regarding the content of core obligations than with other rights. In relation to the right to adequate food, for example, the Committee has affirmed that States Parties are required to ensure access to the minimum essential level of food necessary to ensure freedom from hunger.[75] Although less frequently referenced, the Committee has also held that the right to water obliges States Parties to ensure access to the minimum essential amount of water "that is sufficient and safe for personal and domestic uses to prevent disease".[76] The Committee has also regularly referred to the minimum core content of social security benefits, requiring a minimum essential level of benefits.[77] The standard or level of benefits required has been described in relation to subsistence;[78] coverage for major life risks;[79] access to health services and income security;[80] and the minimum level of benefits necessary "to acquire at least essential health care, basic shelter and housing, water and sanitation, food and the most basic forms of education".[81] Of course it will be clear from the above that even these more explicit descriptions of minimum core content do not provide precise quantitative levels which are universally applicable. The Committee thus provides room for individual States Parties to prescribe appropriate minimum essential levels for their specific contexts according to the standards set out in its general comments.

Determining the parameters of the minimum core continues to be a subject of debate, perhaps most comprehensively examined in the work of Katherine Young.[82] Young describes three distinct approaches to the minimum core: the essence approach; the consensus approach; and the obligations approach.[83] The essence approach can be described as the search for an essential minimum which links the core elements of a right to a foundational norm.[84] The consensus approach views the minimum core as the "agreed-upon nucleus" of the relevant right.[85] The third approach to minimum core content is not, as Young explains, an alternative to the essence and consensus approaches, but "it relies on,

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[75] CESCR *General Comment No 12* para 6, 14 & 17; CESCR *General Comment No 14* para 43(b); CESCR *The World Food Crisis* para 7-8; CESCR *Duties of States towards Refugees and Migrants under the ICESCR* para 9; CESCR *Benin* (2008) para 44; CESCR *Kenya* (2008) para 28; CESCR *Angola* (2008) para 29; CESCR *Sudan* (2015) para 50.
[76] CESCR *General Comment No 15* para 37. See also para 44(c) & 56.
[77] CESCR *General Comment No 19* para 59; CESCR *Social Protection Floors* para 8; CESCR *Liechtenstein* (2017) para 25; CESCR *Uruguay* (2017) para 30; CESCR *Honduras* (2016) para 35; CESCR *Sweden* (2016) para 20; CESCR *Iceland* (2012) para 13.
[78] CESCR *Concluding Observations, Georgia* (19 December 2002) E/C12/1/Add83 para 17 & 35.
[79] CESCR *Benin* (2008) para 37.
[80] CESCR *Social Protection Floors* para 7.
[81] CESCR *Social Protection Floors* para 8.
[82] See Young (2008) *Yale Journal of International Law* 113-175.
[83] Young (2008) *Yale Journal of International Law* 116-117.
[84] 126.
[85] 140.

and incorporates, these justifications within its assessment of obligation".[86] Young ultimately argues that all three approaches to the minimum core are problematic and that the functions of the minimum core may be better served by other approaches, including the use of indicators and benchmarks and limitations on rights.[87] Despite these and other criticisms of the minimum core approach to ESCRs,[88] it is clear from its general comments that the Committee supports an approach to the Covenant which includes the delineation of core obligations.[89] Precisely how the minimum core content or obligations are determined is less evident from the doctrine of the Committee.

Another relevant criticism relates to the characterisation of minimum core content or obligations as the "floor" of ESCRs. The concept of the minimum core is a minimalist strategy to draw attention to the most severe material deprivation.[90] While this emphasis on the minimum or floor of ESCRs is important and necessary, many have pointed out the risk that "the 'floor' will become a 'ceiling'".[91] In other words, the focus on the bare minimum required by core obligations may cause States Parties to lower their objectives and become complacent once these minimum obligations are met. This could lead to complacency and disregard for State obligations that are regarded as falling within the realm of non-core duties, but are nevertheless essential for the full realisation of the relevant rights.[92] This criticism cautions against an exclusive focus on minimum core obligations that loses sight of progressive realisation. Core obligations are an important point of departure, but they must be followed by the active pursuit of progressive realisation.[93] Successfully meeting the core obligations does not absolve a State Party from the obligation to pursue the full realisation of ESCRs "as expeditiously and effectively as possible".[94]

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[86] Young (2008) *Yale Journal of International Law* 151.
[87] Young (2008) *Yale Journal of International Law* 164-170. See also Tasioulas *Minimum Core Obligations* 30-32; Forman, Caraoshi, Chapman & Lamprea (2016) *International Journal of HR* 538.
[88] See, for example, Forman, Caraoshi, Chapman & Lamprea (2016) *International Journal of HR* 538-540.
[89] See CESCR *General Comment No 12* para 6 & 8; CESCR *General Comment No 13* para 57; CESCR *General Comment No 14* para 43; CESCR *General Comment No 15* para 37; CESCR *General Comment No 17* para 39; CESCR *General Comment No 18* para 31; CESCR *General Comment No 19* para 59; CESCR *General Comment No 21* para 55; CESCR *General Comment No 22* para 49; CESCR *General Comment No 23* para 65; CESCR *General Comment No 25* para 52.
[90] Young (2008) *Yale Journal of International Law* 113-114.
[91] Chapman & Russell "Introduction" in *Core Obligations: Building a Framework for ESCR* 9; Forman, Caraoshi, Chapman & Lamprea (2016) *International Journal of HR* 536. See also Odello & Seatzu *The UN Committee on ESCR* 20; Tasioulas *Minimum Core Obligations* 28-29.
[92] Chapman & Russell "Introduction" in *Core Obligations: Building a Framework for ESCR* 9; Tasioulas *Minimum Core Obligations* 15; Odello & Seatzu *The UN Committee on ESCR* 20.
[93] CESCR *Poverty and the International Covenant on Economic, Social and Cultural Rights* (10 May 2001) E/C12/2001/10 para 18; CESCR *Social Protection Floors* para 10. See also Ssenyonjo (2011) *IJHR* 978; Sepúlveda *Nature of Obligations under the ICESCR* 369; Tasioulas *Minimum Core Obligations* 29.
[94] CESCR *General Comment No 13* para 44; CESCR *General Comment No 14* para 31; CESCR *General Comment No 17* para 26; CESCR *General Comment No 18: The Right to Work (Art 6 of the Covenant)* (6

The core obligations in respect of ESCRs serve an important function in providing a necessary baseline for States Parties' obligations under the Covenant. This ensures that States Parties do not invoke the flexibility of progressive realisation in order to avoid their Covenant obligations. Minimum core obligations also provide a point of departure for the prioritisation of various ESCR-related obligations due to their immediate nature and their prioritised position in relation to retrogressive measures and article 4 limitations. As discussed above, there remains a degree of uncertainty regarding the precise scope and content of minimum core obligations which requires further clarification. The following section examines the integration of environmental considerations within core obligations under the Covenant arguing that the core of ESCRs is reliant on a healthy environment and natural resources.

6 2 2 Core obligations and the principles of IEL

Environmental considerations are fundamental to the ability of States Parties to meet their core obligations. The core of ESCRs is dependent on a safe and healthy environment, and protection of the environment and natural resources is therefore integral to realising the minimum core of Covenant rights.[95] The minimum core of the rights to food and water, for example, cannot be realised if the natural resources of soil and water are polluted and contaminated beyond repair.[96] In accordance with the principle of sustainable development,[97] it is therefore essential to integrate environmental considerations within measures aimed at realising the minimum core. A failure to do so will put the core of ESCRs and basic subsistence at risk from the impacts of climate change and environmental degradation.

Many of the above recommendations and observations require a degree of clarity regarding the content of the minimum core. This is certainly an area that warrants further research. In addition to the scope and parameters of core obligations as a whole, it is also recommended that a baseline is established for the minimum environmental conditions necessary in order to realise Covenant rights. States Parties' core obligations under the Covenant must include an obligation to maintain and protect these minimum environmental conditions required to meet core obligations. This environmental dimension of the minimum

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February 2006) E/C12/GC/18 para 20. See also CESCR *General Comment No 21: Right of Everyone to Take Part in Cultural Life (art 15, para 1(a) of the Covenant)* (21 December 2009) E/C12/GC/21 para 45.

[95] See Chapter 2, 2 2 and 2 3 on the impacts of environmental degradation and climate change on ESCRs.

[96] See, for example, UNEP *Compendium on Human Rights and the Environment: Selected International Legal Materials and Cases* (2014) 13. UNEP *Climate Change and Human Rights* (2015) 1. See also CESCR *General Comment No 15* para 28.

[97] See Chapter 4, 4 3 1 on sustainable development.

core doctrine could be described as the inverse of the "ecological ceiling" described by Raworth in relation to the concept of doughnut economics.[98] In contrast to delineating the ecological ceiling or planetary boundaries[99] which must not be transgressed, these minimum environmental conditions would demarcate the baseline environmental conditions that all States Parties must protect in order to guarantee their ability to meet minimum core obligations as required by the Covenant. It is recommended that States Parties identify and demarcate these baseline environmental conditions individually and in cooperation with other States Parties in order to safeguard these minimum environmental conditions at a local, regional and international level.

Any appropriate prioritisation of the minimum core requires the prioritisation of the environmental base on which ESCRs depend. Environmental decision-making should therefore be guided by the minimum core so as to prioritise environmental protection for ecosystems and natural resources on which the core of ESCRs depend.

The doctrine of the minimum core underscores the priority and urgency of ensuring that core obligations towards the current generation are met. In the context of the Covenant, the principle of intergenerational equity does not alter this. The priority for States Parties remains with their immediate core obligations. However, the principle of intergenerational equity suggests that, wherever possible, measures that protect the environment for future generations while meeting core obligations must be taken. Such measures must always be preferred over measures that meet core obligations at the expense of the environment and future generations. Where there is a threat to the ability of States Parties to meet their core obligations in future, this should be addressed with relative urgency, considering the priority of core obligations over other obligations of progressive realisation.

Turning to the principle of intragenerational equity, the obligation of international assistance and cooperation requires States Parties to act in order to ensure core obligations are met where they are threatened in other jurisdictions as a result of environmental degradation and climate change. Given the widespread and global nature of climate change impacts, and their disproportionate impact on the poor and on the global south, the obligation of international assistance and cooperation necessitates concrete action for climate change mitigation and adaptation in order to safeguard the realisation of minimum core content by

[98] Raworth *Doughnut Economics* 44 & 51.
[99] See, for example, J Rockström, W Steffen, K Noone, Å Persson, FS Chapin III, EF Lambin, TM Lenton, M Scheffer, C Folke, HJ Schnellnhuber, B Nykvist, CA De Wit, T Hughes, S Van der Leeuw, H Rodhe, S Sorlin, PK Snyder, R Costanza, U Svedin, M Falkenmark, L Karlberg, RW Corell, VJ Fabry, J Hansen, B Walker, D Liverman, K Richardson, P Crutzen, JA Foley, "A Safe Operating Space for Humanity" (2009) 461 *Nature* 472.

all States Parties to the Covenant. The principle of CBDR underscores this need for international assistance and cooperation. Where climate change is concerned, States Parties that are able to comfortably meet core obligations must assist other States Parties struggling to meet their core obligations. This is particularly relevant where the former States Parties have substantially contributed to climate change, and the latter are unable to meet core obligations as a direct result of the impacts of climate change.

Similarly, considering the no-harm principle[100] suggests that States Parties responsible for environmental harm affecting the minimum core of ESCRs in other jurisdictions must provide the necessary assistance and cooperation in order to protect the relevant ESCRs and to remedy the environmental damage caused.[101] In taking measures to address transboundary harm, States Parties should treat environmental impacts on minimum core obligations with the necessary urgency and priority.

Where there is potential future risk to the realisation of core obligations as a result of environmental harm, the preventive principle underscores the need to take measures to prevent such harm rather than to attempt to rectify it after the fact.[102] Failure to address such environmental harm timeously and in accordance with the preventive principle may result in a violation of core obligations. In order to give effect to the preventive principle, and to protect the core of ESCRs where an environmental threat exists, resources will be required to secure and maintain the minimum core content of ESCRs. Decisions regarding the allocation of such resources to environmental protection will need to take into account the level of risk and the likelihood and severity of potential impacts on the minimum core. In line with the precautionary principle, a lack of certainty regarding these impacts must not excuse inaction where the potential harm will violate the minimum core content of ESCRs. While the precautionary principle can also be applied to other aspects of ESCRs, the standard of caution must be higher where the minimum core is at risk, particular where there are threats to basic subsistence. In other words, a particular activity that may yield significant socio-economic benefits cannot be justified if it poses an environmental risk (albeit uncertain) resulting in harm to core obligations or basic subsistence needs. Particular caution must be exercised, for example, where any ecosystem or environmental function integral to meeting core obligations is threatened.

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[100] In relation to the no-harm principle, see Chapter 4, 4 3 2 2 2.
[101] On the relationship between core obligations and international assistance and cooperation, see CESCR *General Comment No 8* para 7; CESCR *General Comment No 14* para 45; CESCR *General Comment No 15* para 38; CESCR *General Comment No 17* para 40; CESCR *General Comment No 19* para 61; CESCR *General Comment No 25* para 51.
[102] See Chapter 4, 4 3 2 3 where the preventive principle is discussed in more detail.

A failure to require the protection of the most basic conditions necessary for the realisation of the core of ESCRs, is a failure to ensure that the Covenant is effective in realising ESCRs both now and in the future. Any such core environmental obligation would require further investigation in order to determine the appropriate scope and content of the minimum environmental conditions necessary for the core of ESCRs. However, the guidance of the principles of IEL analysed in Chapter 4 is a useful starting point. Ultimately, the urgency and priority afforded to minimum core obligations under the Covenant, must also be applied to protecting the environmental conditions on which such obligations depend, and to preventing harm posed by environmental degradation and climate change. Any effective measures to meet core obligations for all States Parties must also include the international assistance and cooperation required by the Covenant. Any interpretation of the Covenant that is effective in protecting individual rights holders and that evolves appropriately according to current circumstances, must protect the environmental base on which the most basic core of ESCRs relies.[103]

6 3 Progressive realisation

6 3 1 Introduction

Article 2(1) requires States Parties to the Covenant to take steps to the maximum of their available resources "with a view to achieving progressively the full realization of the rights recognized in [the Covenant]". The Committee describes progressive realisation as a "necessary flexibility device" that allows States Parties to act in accordance with their capabilities and level of development.[104] The Committee has explained that progressive realisation should not be interpreted so as to deprive article 2(1) of "all meaningful content".[105] The Committee has also stressed that despite the reference to progressive realisation in article 2(1), States Parties have immediate obligations in relation to Covenant rights.[106] Progressive realisation "means that States parties have a specific and continuing

[103] See Chapter 3, 3 3 3 2 and 3 3 4 3 in relation to effectives and the evolutive approach in the interpretation of the Covenant.
[104] CESCR *General Comment No 3: The Nature of States Parties' Obligations (Art 2, Para 1, of the Covenant)* (14 December 1990) E/1991/23 para 9.
[105] CESCR *General Comment No 3* para 9.
[106] CESCR *General Comment No 13: The Right to Education (Art 13 of the Covenant)* (8 December 1999) E/C12/1999/10 para 43; CESCR *General Comment No 14: The Right to the Highest Attainable Standard of Health (Art 12 of the Covenant)* (11 August 2000) E/C12/2000/4 para 30; CESCR *General Comment No 15: The Right to Water (Arts 11 and 12 of the Covenant)* (20 January 2003) E/C12/2002/11 para 17; CESCR *General Comment No 17: The Right of Everyone to Benefit from the Protection of the Moral and Material Interests resulting from any Scientific, Literary or Artistic Production of which He or She is the Author (Art 15, Para 1(c) of the Covenant)* (12 January 2006) E/C12/GC/17 para 25; CESCR *General Comment No 19: The Right to Social Security (Art 9 of the Covenant)* (4 February 2008) E/C12/GC/19 para 40.

obligation to move as expeditiously and effectively as possible towards the full realization" of the relevant right.[107] This formulation underscores the fact that progressive realisation requires ongoing progress in realising ESCRs and that this progress should be pursued without delay.

Progressive realisation therefore does not mean that States Parties "may infinitely postpone taking action".[108] Instead it requires States Parties to take deliberate, concrete and targeted steps,[109] within a reasonably short period of time,[110] towards the realisation of ESCRs. The steps required for progressive realisation cover a range of categories, including legislative, administrative, financial, educational and social measures.[111] States Parties are also required to "monitor the realisation of ESC rights and to devise appropriate strategies and clearly defined programmes […] for their implementation".[112] In General Comment 1 the Committee affirms that States Parties are required to "work out and adopt a detailed plan of action for progressive realisation".[113]

An obligation to plan for the progressive realisation of ESCRs necessarily requires a forward-looking view of the realisation of Covenant rights. Ensuring the effective progressive realisation of ESCRs therefore requires a perspective that takes future needs into account. Although it is analysed in more detail below, it is important to note here that the duty to avoid retrogression implies that ESCRs must be maintained into the future and that temporary gains in the realisation of ESCRs are insufficient for compliance with the Covenant.[114] Dowell-Jones argues that article 2(1) includes the principle that "[o]bjectives set must not be

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[107] CESCR *General Comment No 13* para 44; CESCR *General Comment No 14* para 31; CESCR *General Comment No 17* para 26; CESCR *General Comment No 18: The Right to Work (Art 6 of the Covenant)* (6 February 2006) E/C12/GC/18 para 20. See also CESCR *General Comment No 21: Right of Everyone to Take Part in Cultural Life (Art 15, Para 1(a) of the Covenant)* (21 December 2009) E/C12/GC/21 para 45.

[108] CESCR *Duties of States towards Refugees and Migrants under the International Covenant on Economic, Social and Cultural Rights* (13 March 2017) E/C12/2017/1 para 4.

[109] CESCR *General Comment No 3* para 2; CESCR *General Comment No 19* para 40; CESCR *General Comment No 23: The Right to Just and Favourable Conditions of Work (Art 7 of the Covenant)* (7 April 2016) E/C12/GC/23 para 50; CESCR *General Comment No 25: Science and Economic, Social and Cultural Rights* (Art 15(1)(b), 15(2), 15(3) and 15(4)) (7 April 2020) E/C12/GC/25 para 23.

[110] CESCR *General Comment No 3* para 2.

[111] See, for example, CESCR *General Comment No 3* para 3-7; "The Limburg Principles on the Implementation of the International Covenant on Economic, Social and Cultural Rights" (1987) 9 *HR Quarterly* 122-135 para 16-20.

[112] M Ssenyonjo *Economic, Social and Cultural Rights in International Law* (2016) 92. Ssenyonjo notes that programmes for the progressive realisation of ESCRs include indicators and national benchmarks or targets. See, for example, "The Maastricht Guidelines on Violations of Economic, Social and Cultural Rights" (1998) 20 *HR Quarterly* 691–704, para 8; CESCR *General Comment No 14* para 57-58.

[113] CESCR *General Comment No 1: Reporting by States Parties* (27 July 1981) E/1989/22 para 4. See also, for example, CESCR *General Comment No 13* para 52; CESCR *General Comment No 14* para 36.

[114] On the important relationship between non-retrogression and sustainability, see UNHRC *Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Catarina de Albuquerque* (11 July 2013) A/HRC/24/44 para 13-17. See also 6 4 below.

such as to detrimentally impact the future ability of the State to implement the Covenant".[115] In order for States Parties to ensure effective progressive realisation and avoid retrogression, the measures taken under article 2(1) must include a future-oriented perspective and long-term strategies for the sustained realisation of ESCRs.

While progressive realisation includes a host of significant immediate and short-term obligations, this chapter focuses on the long-term effectiveness of measures taken towards progressive realisation. This temporal aspect of progressive realisation is particularly important for the integration of environmental considerations as well as for the rights of future generations. Environmental harm often has significant long-term or irreversible impacts, and these impacts may only materialise well after the catalysing harmful conduct or activity.[116] A forward-looking perspective of the progressive realisation of ESCRs is therefore essential for long-term environmental protection and for safeguarding ESCRs against environmental threats.

The section below investigates temporality in the Covenant with an emphasis on examining how the Committee has dealt with the long-term and future-oriented dimension of progressive realisation, including through its references to sustainability. This is followed by an analysis of long-term environmental concerns in the Committee's work and the potential role of sustainability in supporting an integration of environmental considerations and progressive realisation. The position of future generations and the relevance of their rights in the pursuit of progressive realisation is then addressed.

6 3 2 Progressive realisation and temporality in the Covenant

Hiskes argues that "[r]ights are very future-oriented things" and points out the "conceptual closeness of rights and promises", drawing attention to the forward-looking nature of both.[117] This orientation towards the future is particularly evident in relation to ESCRs and the long-term dimensions of the concept of progressive realisation. It is clear from the work of the Committee that a forward-looking view of ESCRs, including the adoption of plans and strategies for progressive realisation, does not mean that State Parties are permitted to

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[115] M Dowell-Jones *Contextualising the International Covenant on Economic, Social and Cultural Rights: Assessing the Economic Deficit* (2004) 55.

[116] See, for example, I Michallet "Equity and the Interests of Future Generations" in L Krämer & E Orlando (eds*) Principles of Environmental Law* (2018) 150 150; L Duvic-Paoli "Principle of Prevention" in L Krämer & E Orlando (eds) *Principles of Environmental Law* (2018) 161 166; P Dupuy & JE Viñuales *International Environmental Law* (2018) 66.

[117] RP Hiskes "Introduction: The Intergenerational Promise of Environmental Human Rights" (2016) 15 *JHRE* 229 229.

indefinitely delay action to realise Covenant rights.[118] As noted above, the obligation to continuously improve conditions has been described by the Committee as an obligation to move "as expeditiously and effectively as possible" towards the full realisation of Covenant rights.[119] This progress requires movement towards the full enjoyment of ESCRs, and such movement is necessarily fixed in time. While the speed at which progressive realisation should occur is described as "expeditious", there are few fixed time frames attached to the realisation of ESCRs.[120] One notable exception to this is article 14 of the Covenant which requires States Parties "to work out and adopt a detailed plan of action" within two years for the progressive realisation of the right to primary education "within a reasonable number of years".[121] Aside from this reference to a specified time-frame, in relation to other ESCRs States Parties are simply required to take "deliberate, concrete and targeted steps"[122] within a reasonably short period.[123] On numerous occasions the Committee has also recommended that States Parties set their own time-frames for the progressive realisation of Covenant rights through time-bound benchmarks or targets.[124] As noted above, there are also certain obligations that the Committee requires States Parties to meet immediately.[125]

Immediate obligations are those obligations that are not subject to the qualifications of progressive realisation or maximum available resources and require "immediate implementation in full".[126] These immediate obligations must be met by all States Parties regardless of their respective levels of development, and this should be done without delay.[127] Notable immediate obligations include the obligation to take steps and the

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[118] See, for example, CESCR *Duties of States towards Refugees and Migrants under the ICESCR* para 4; CESCR *General Comment No 3* para 9; CESCR *General Comment No 13* para 44. See also "The Limburg Principles on the Implementation of the International Covenant on Economic, Social and Cultural Rights" (1987) 9 *HR Quarterly* 122-135 para 21.
[119] CESCR *General Comment No 3* para 9; CESCR *General Comment No 13* para 44; CESCR *General Comment No 17* para 26; CESCR *General Comment No 22* para 33; CESCR *General Comment No 23* para 51.
[120] Young "Waiting for Rights" in *The Future of ESR* 683, 671-673.
[121] ICESCR article 14.
[122] CESCR *General Comment No 3* para 2; CESCR *General Comment No 15* para 17; CESCR *General Comment No 19* para 40; CESCR *General Comment No 25* para 23.
[123] CESCR *General Comment No 3* para 2; CESCR *General Comment No 22* para 33; CESCR *General Comment No 25* para 23.
[124] See CESCR *General Comment No 11* para 10; CESCR *General Comment No 14* para 56; CESCR *General Comment No 16* para 39; CESCR *General Comment No 18* para 38; CESCR *General Comment No 19* para 68; CESCR *General Comment No 21* para 71; CESCR *General Comment No 24* para 59; CESCR *General Comment No 25* para 88.
[125] See 6 2 1 2 above for examples of immediate obligations.
[126] "The Limburg Principles on the Implementation of the International Covenant on Economic, Social and Cultural Rights" (1987) 9 *HR Quarterly* 122-135 para 22.
[127] Sepúlveda *Nature of Obligations under the ICESCR* 175.

obligation to guarantee the rights in the Covenant without discrimination.[128] Minimum core obligations are also described by the Committee as being of "immediate effect".[129] Each of the rights in part III of the Covenant requires States Parties to take both immediate and progressive measures to meet their Covenant obligations.[130]

As Young notes, both immediate and progressive obligations necessitate a degree of delay, whether that is the time it takes to accumulate and mobilise necessary resources; the time it takes to enact relevant legislation; or the time taken to develop a strategy or plan of action for the realisation of a right.[131] Although these obligations could be distinguished according to their immediate or progressive nature, both forms of obligation necessitate the passage of a certain amount of time. In this regard Alston and Quinn note the "artificiality of the idealized way in which the immediate/progressive distinction is often portrayed".[132] Young also asserts that this overlap between immediate and progressive obligations problematises any distinction between ESCRs and civil and political rights which suggests that the latter are able to be realised immediately and do not involve any delays.[133] Regardless of the degree of time required, it is clear that, at the very least, the obligations identified as immediate obligations by the Committee must be met as a matter of urgency.

It is therefore evident that time has an important role to play in progressive realisation and the concept of progress in relation to ESCRs. In order to ensure progressive realisation over the long term, States Parties must have a forward-looking perspective in planning future measures for realising ESCRs as well as in implementing more immediate measures that may only have an impact at a later stage. For many ESCRs, a sustained increase in enjoyment requires structural changes to laws, policies, institutions or infrastructure. As such

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[128] ICESCR article 2(1) & 2(2); CESCR *General Comment No 3* para 1-2; CESCR *General Comment No 13* para 43; CESCR *General Comment No 14* para 30. See also Sepúlveda *Nature of Obligations under the ICESCR* 176.

[129] CESCR *General Comment No 13* para 43; CESCR *General Comment No 14* para 30; CESCR *General Comment No 15* para 37; CESCR *General Comment No 17* para 25 & 39; CESCR *General Comment No 21* para 67 & 55; CESCR *General Comment No 23* para 52. See also 6 2 1 2 above.

[130] See for example CESCR *General Comment No 12: The Right to Adequate Food (Art 11 of the Covenant)* (12 May 1999) E/C12/1999/5 para 16.

[131] Young "Waiting for Rights" in *The Future of ESR* 663-664.

[132] See also P Alston & G Quinn "The Nature and Scope of States Parties' Obligations under the International Covenant on Economic, Social and Cultural Rights" (1987) 9 *HR Quarterly* 156 173. See also Young "Waiting for Rights" in *The Future of ESR* 664.

[133] Young "Waiting for Rights" in *The Future of ESR* 673-674. See also Alston & Quinn (1987) *HR Quarterly* 172-173.

structural changes cannot occur overnight, many ESCRs will, by their nature, necessitate measures taken with a long-term perspective.[134]

Düwell and Bos argue that many elements of human rights are inherently "future-oriented", noting that "[h]uman rights protect the individual's capacity for future-oriented action and the realization of long-term plans".[135] The authors cite the examples of the right to education which aims to enhance future opportunities for children and, in an implicit reference to the right to culture, the "possibility that entire cultures can perpetuate themselves in the future".[136] Shue similarly suggests that many large-scale and long-term projects require the efforts of multiple generations, and that "in many respects the future and its people are dependent on those of us alive now".[137] He notes, for example, that "a single generation cannot build a great university" or a thriving economy.[138] The structural and institutional changes necessary to realise most ESCRs require progressive realisation that incorporates long-term strategies and aims to realise ESCRs both now and in the future.

Many examples of this long-term dimension of ESCRs and of progressive realisation can be found in the Committee's work. In its concluding observations, the Committee has recommended long-term strategies in relation to housing;[139] combatting poverty;[140] and finding solutions to unemployment.[141] The Committee has also noted the sustained long-term efforts required in order to change attitudes regarding xenophobia and racism,[142] as well as gender discrimination.[143] This forward-looking perspective is particularly evident in relation to the Committee's approach to children and the right to education. The Committee

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[134] See, for example, H Shue "Changing Images of Climate Change: Human Rights and Future Generations" (2014) 5 *Journal of Human Rights and the Environment* 50 59; M Düwell & G Bos "Human Rights and Future People: Possibilities of Argumentation" (2016) 15 *Journal of Human Rights* 231 233.
[135] M Düwell & G Bos "Human Rights and Future People: Possibilities of Argumentation" (2016) 15 *Journal of Human Rights* 231 233.
[136] Düwell & Bos (2016) *Journal of HR* 233.
[137] H Shue "Changing Images of Climate Change: Human Rights and Future Generations" (2014) 5 *Journal of Human Rights and the Environment* 50 59.
[138] Shue (2014) *JHRE* 59.
[139] CESCR *Concluding Observations, Denmark* (12 November 2019) E/C12/DNK/CO/6 para 48; CESCR *Republic of Korea* (6 October 2017) E/C12/KOR/CO/4 para 52-53; CESCR *Concluding Observations, Canada* (23 March 2016) E/C12/CAN/CO/6 para 34; CESCR *Concluding Observations, Sweden* (14 July 2016) E/C12/SWE/CO/6 para 40; CESCR *Concluding Observations, Iraq* (27 October 2015) E/C12/IRQ/CO/4 para 48; CESCR *Concluding Observations, Colombia* (7 June 2010) E/C.12/COL/CO/5 para 24.
[140] CESCR *Concluding Observations, Argentina* (1 November 2018) E/C12/ARG/CO/4 para 44; CESCR *Concluding Observations, Lebanon* (24 October 2016) E/C12/LBN/CO/2 para 31; CESCR *Concluding Observations, Austria* (13 December 2013) E/C12/AUT/CO/4 para 17.
[141] CESCR *Concluding Observations, Slovenia* (15 December 2014) E/C12/SVN/CO/2 para 16(a); CESCR *Concluding Observations, Djibouti* (30 December 2013) E/C12/DJI/CO/1-2 para 15; CESCR *Concluding Observations, Gabon* (27 December 2013) E/C12/GAB/CO/1 para 15; CESCR *Concluding Observations, Jamaica* (10 June 2013) E/C12/JAM/CO/3-4 para 13.
[142] CESCR *Concluding Observations, The Netherlands* (9 December 2010) E/C12/NDL/CO/4-5 para 12.
[143] CESCR *Concluding Observations, Liechtenstein* (3 July 2017) E/C12/LIE/CO/2-3 2017 para 16(c).

has often emphasised the role of education in enhancing the future prospects and future well-being of children.[144]

In addition to the above, the concept of sustainability is often used by the Committee to indicate a consistent and long-term realisation of rights.[145] In order for programmes related to ESCRs to be considered sustainable, they should be capable of maintaining a certain level of enjoyment over the long term without an interruption or reduction in respect of the realisation of the relevant right (i.e. without retrogression). It is important to note that the Committee's use of "sustainability" does not necessarily relate to the environment or sustainable development. While this dissertation argues that maintaining sustainable systems and programmes for the progressive realisation of ESCRs does necessitate incorporating environmental considerations, it is not always clear that this is the Committee's intention when using the term "sustainability". From the context it seems that by "sustainability" the Committee usually means to refer to the ability of a particular measure to be sustained over a long period. In any event, the references to sustainability confirm that the Committee supports a long-term view of ESCRs and requires States Parties to continue to maintain (or improve on) certain levels of enjoyment of ESCRs. This is also supported by the duty to avoid retrogressive measures.[146]

In relation to economic and financial sustainability, it is useful to note the impacts that unsustainable approaches can have on future generations.[147] For example, in relation to the use of sovereign bond markets, Dowell-Jones warns that "extending future claims without

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[144] CESCR *Concluding Observations, Poland* (26 October 2016) E/C12/POL/CO/6 para 56; CESCR *Concluding Observations, Lithuania* (24 June 2014) E/C12/LTU/CO/2 para 23; CESCR *Concluding Observations, Montenegro* (15 December 2014) E/C12/MNE/CO/1 para 25; CESCR *Austria* (2013) para 22; CESCR *Concluding Observations, Nepal* (16 January 2008) E/C12/NPL/CO/2 para 47; CESCR *Concluding Observations, Liechtenstein* (9 June 2006) E/C12/LIE/CO/1 para 36.

[145] See, for example, CESCR *Concluding Observations, Ecuador* (14 November 2019) E/C12/ECU/CO/4 para 37; CESCR *Concluding Observations, Cabo Verde* (27 November 2018) E/C12/CPV/CO/1 para 38-39; CESCR *Concluding Observations, Spain* (25 April 2018) E/C12/ESP/CO/6 para 31; CESCR *Concluding Observations, Uganda* (8 July 2015) E/C12/UGA/CO/1 para 24; CESCR *Concluding Observations, Ukraine* (13 June 2014) E/C12/UKR/CO/6 para 16; CESCR *Concluding Observations, Togo* (3 June 2013) E/C12/TGO/CO/1 para 19; CESCR *Jamaica* (2013) para 18; CESCR *Djibouti* (2013) para 21; CESCR *Concluding Observations, Hungary* (16 January 2008) E/C12/HUN/CO/3 para 4(c); CESCR *Concluding Observations, Zambia* (23 June 2005) E/C12/1/Add106 para 22. See also CESCR *General Comment No 19* paras 11, 55, 65 & 67; CESCR *Social Protection Floors: An Essential Element of the Right to Social Security and of the Sustainable Development Goals* (15 April 2015) E/C12/2015/1 para 15.

[146] For more on retrogression see 6 4 below. On the relationship between sustainability and retrogression see UNHRC *Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Catarina de Albuquerque* (11 July 2013) A/HRC/24/44 para 13-17.

[147] M Dowell-Jones "The Sovereign Bond Markets and Socio-Economic Rights" in Riedel E, G Giacca & C Golay (eds) *Economic, Social and Cultural Rights in International Law: Contemporary Issues and Challenges* (2014) 51 65-68.

an adequate plan for funding them" potentially violates article 2(1).[148] She notes that States Parties that rely too heavily on sovereign bond markets to fund ESCRs:

> "[H]ave effectively mortgaged the rights of future generations to enjoy their socio-economic rights in order to satisfy the socio-economic rights of the current generation, as the debt will have to be repaid by future tax-payers".[149]

It evident that unsustainable approaches to the environment have a similar effect of mortgaging the rights of future generations, placing the burden on them to bear the burden of damage done and resources depleted by the current generation.[150]

In its concluding observations and general comments, the Committee has often referred to the sustainability of social security as well as the sustainability of the financial institutions on which social security depends.[151] Similarly, the Committee has recommended that strategies to create jobs and combat unemployment are sustainable.[152] More directly related to environmental considerations is the Committee's call for sustainable strategies in relation to agriculture and the realisation of the right to food.[153] Referring to the sustainability of all ESCRs, the Committee's 2019 statement on the 2030 Agenda for Sustainable Development refers to "the importance of ensuring that rights are fulfilled through methods that are sustainable so as to ensure that the rights are secured both for present and future

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[148] Dowell-Jones "The Sovereign Bond Markets and Socio-Economic Rights" in *ESCR in International Law* 66.
[149] Dowell-Jones "The Sovereign Bond Markets and Socio-Economic Rights" in *ESCR in International Law* 66.
[150] See also De Schutter "Public Budget Analysis" in *The Future of ESR* 541.
[151] CESCR *Concluding Observations, Ecuador* (14 November 2019) E/C12/ECU/CO/4 para 37; CESCR *Concluding Observations, Cabo Verde* (27 November 2018) E/C12/CPV/CO/1 para 38-39; CESCR *Concluding Observations, Spain* (25 April 2018) E/C12/ESP/CO/6 para 31; CESCR *Concluding Observations, Uganda* (8 July 2015) E/C12/UGA/CO/1 para 24; CESCR *Concluding Observations, Ukraine* (13 June 2014) E/C12/UKR/CO/6 para 16; CESCR *Concluding Observations, Togo* (3 June 2013) E/C12/TGO/CO/1 para 19; CESCR *Jamaica* (2013) para 18; CESCR *Djibouti* (2013) para 21; CESCR *Concluding Observations, Hungary* (16 January 2008) E/C12/HUN/CO/3 para 4(c); CESCR *Concluding Observations, Zambia* (23 June 2005) E/C12/1/Add106 para 22. See also CESCR *General Comment No 19* paras 11, 55, 65 & 67; CESCR *Social Protection Floors: An Essential Element of the Right to Social Security and of the Sustainable Development Goals* (15 April 2015) E/C12/2015/1 para 15.
[152] CESCR *Concluding Observations, Cameroon* (25 March 2019) E/C12/CMR/CO/4 para 31; CESCR *Concluding Observations, Senegal* (13 November 2019) E/C12/SEN/CO/3 para 17; CESCR *Concluding Observations, Mali* (6 November 2018) E/C12/MLI/CO/1 para 19; CESCR *Concluding Observations, Uruguay* (20 July 2017) E/C12/URY/CO/5 para 18; CESCR *Concluding Observations, Romania* (9 December 2014) E/C12/ROU/CO/3-5 para 11(d); CESCR *Ukraine* (2014) para 12(e); CESCR *Colombia* (2010) para 28; CESCR *Concluding Observations, Republic of Korea* (17 December 2009) E/C12/KOR/CO/3 para 14; CESCR *Concluding Observations, Bolivia* (8 August 2008) E/C12/BOL/CO/2 para 30; CESCR *Concluding Observations, Costa Rica* (4 January 2008) E/C12/CRI/CO/4 para 39; CESCR *Hungary* (2008) para 34.
[153] CESCR *Concluding Observations, Guinea* (30 March 2020) E/C12/GIN/CO/1 para 40(c); CESCR *Concluding Observations, Germany* (27 November 2018) E/C12/DEU/CO/6 para 12-13; CESCR *Concluding Observations, Moldova* (19 October 2017) E/C12/MDA/CO/3 para 69; CESCR *Concluding Observations, Guatemala* (9 December 2014) E/C12/GTM/CO/3 para 21; CESCR *Jamaica* (2013) para 26; CESCR *Concluding Observations, Nicaragua* (28 November 2008) E/C12/NIC/CO/4 para 23. See also CESCR *General Comment No 12* para 7,8,16 & 25; CESCR *General Comment No 15* para 7; CESCR *Statement in the Context of the Rio+20 Conference on "The Green Economy in the Context of Sustainable Development and Poverty Eradication"* (4 June 2012) E/C12/2012/1 para 6(d); CESCR *The World Food Crisis* (20 May 2008) E/C12/2008/1 para 8 & 13.

generations".[154] Any truly sustainable approaches to ESCRs will have to take environmental considerations into account, and it is therefore recommended that future references to sustainability are more explicit in this regard. In some instances, the Committee's references to sustainability are more explicitly linked to the environment. These examples are examined further below.[155]

At this point it is useful to note that the forward-looking and future-oriented dimension of progressive realisation discussed above by no means precludes the use of short-term measures. The requirement to move as "expeditiously" as possible certainly implies that States Parties must realise ESCRs in the shortest time possible.[156] Some circumstances will therefore require immediate intervention through means which may not be sustainable over the long term. However, the obligation of progressive realisation demands that States Parties develop strategies that consider, in addition to these immediate needs, how ESCRs can be sustained, and improved upon, into the future.

It is therefore clear that the Committee is in support of a long-term and forward-looking view of the progressive realisation of ESCRs. However, as noted above, the Committee's references to sustainability are not consistently linked to environmental considerations, and its limited references to future generations are similarly not always connected to the environment. Progressive realisation in article 2(1) must be interpreted to require the integration of environmental considerations in long-term measures taken by States Parties in order to ensure that ESCRs can continue to be progressively realised for present and future generations. Such an interpretation would be an appropriate evolution of the Covenant as a living instrument adapting to present-day challenges and conditions.[157] The following section examines such an interpretation of progressive realisation and the Covenant by considering the position of the environment and future generations from a sustainable and forward-looking perspective.

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[154] CESCR *The Pledge to Leave No One Behind: The International Covenant on Economic, Social and Cultural Rights and the 2030 Agenda for Sustainable Development* (5 April 2019) E/C12/2019/1 para 12(e). The relationship between the Covenant and future generations is discussed in more detail at 6 3 3 2 below.

[155] See 6 3 3 1 below.

[156] CESCR *General Comment No 3* para 9; CESCR *General Comment No 13* para 44; CESCR *General Comment No 17* para 26; CESCR *General Comment No 22* para 33; CESCR *General Comment No 23* para 51.

[157] See Chapter 3, 3 3 3 2 2 and 3 3 4 3 in relation to the evolutive approach to interpretation.

6 3 3 A forward-looking perspective: Considering the environment and future generations under the Covenant

6 3 3 1 The Committee's current approach to long-term environmental harm and sustainability

The progressive realisation of ESCRs is inextricably linked to the health of the environment.[158] Environmental degradation and climate change will lead to significant harm to ESCRs unless urgent action is taken to guarantee the realisation of ESCRs now and in the future. The long-term and future-oriented dimension of ESCRs discussed above requires the appropriate regard for environmental considerations and the position of future generations in the realisation of ESCRs. Riley argues that the "delivery of human rights in good faith prohibits partial or token fulfilment of the rights and requires their sustainable delivery into the future".[159] A failure to consider the environment, as well as its impact on future generations, will result in ESCRs that cannot be sustained into the future and therefore cannot be progressively realised. This section discusses how the Committee has dealt with long-term environmental concerns and demonstrates that a future-oriented view of the Covenant and of progressive realisation must incorporate the environment in order to be effective. The position of future generations is discussed further below.[160]

As noted above, the environment and future generations are not always included by the Committee as relevant to a long-term and forward-looking view of progressive realisation, even where the term sustainability is used.[161] However, there are a number of occasions where the Committee has clearly recognised the long-term nature of environmental impacts and considerations, and has required States Parties to take action in this regard.

At this point it is useful to note the distinction between sustainable development and sustainability. As a concept, sustainability can be seen as broadly related to sustainable development. Unfortunately, sustainability is vaguer and more open to interpretation than sustainable development. The term "sustainability" is often used to refer to the longevity of certain approaches in relation to their ability to limit environmental harm and ensure the continued existence of a healthy environment and access to natural resources. However, the term can also be used to refer to longevity outside of the environmental context, which can even be in conflict with environmental sustainability. In some cases, measures taken to

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[158] See Chapter 2.
[159] S Riley "Architectures of Intergenerational Justice: Human Dignity, International Law, and Duties to Future Generations" (2016) 15 *Journal of Human Rights* 272 274.
[160] See 6 3 3 2 below.
[161] See 6 3 2 above.

secure economic sustainability may, for example, rely on environmentally harmful activities and be in conflict with the pursuit of environmental sustainability. Given this ambiguity it is recommended that the Committee define its understanding of sustainability and apply it consistently in order to ensure that the language of sustainability is not used to promote environmentally unsustainable approaches that ultimately threaten the progressive realisation of ESCRs.[162]

While many of the Committee's references to sustainability do not suggest a particular environmental perspective, there are some clear references to environmental sustainability in the Committee's work. Most notably, General Comment 15 not only relies on sustainability, but also provides further definition for the term. In a footnote the Committee refers to the outcomes of the 1992 United Nations Conference on Environment and Development ("Rio Conference") namely the Rio Declaration[163] and Agenda 21, for a "definition of sustainability".[164] The relevant principles in the Rio Declaration referred to by the Committee include: the centrality of human beings in sustainable development; sustainable production and consumption; appropriate exchange of science and technology; participation and access to information; international cooperation to address environmental problems; and the precautionary approach to the prevention of environmental degradation.[165] While the principles of the Rio Declaration have broad application, the more detailed and particular references to Agenda 21 in the context of the Committee's definition of "sustainability" indicate that this definition is intended specifically for the right to water. The General Comment also requires international assistance for the realisation of the right to water to be sustainable, noting a particular responsibility on "economically developed States parties" in this regard.[166]

In General Comment 12 on the right to food, the Committee describes sustainability as "intrinsically linked to the notion of adequate food or food security, implying food being

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[162] The work of the former Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Catarina de Albuquerque is helpful in delineating the concept of sustainability. See UNHRC *Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation* (2013) A/HRC/24/44.
[163] See Rio Declaration on Environment and Development (Rio de Janeiro, June 1992) A/CONF151/26; Agenda 21 (Rio de Janeiro, June 1992) A/CONF151/26 (Vol I-II).
[164] CESCR *General Comment No 15* para 11 fn 11. See also Chapter 4, 4 3 1 1 in relation to the Rio Conference in the context of sustainable development.
[165] CESCR *General Comment No 15* para 11 fn 11 refers to principles 1, 8, 9, 10, 12 and 15 of the Rio Declaration, as well as Agenda 21 in relation to more detailed principles and measures regarding the management, planning and protection of water resources. See Rio Declaration on Environment and Development (Rio de Janeiro, June 1992) A/CONF151/26; Agenda 21 (Rio de Janeiro, June 1992) A/CONF151/26 (Vol I-II).
[166] CESCR *General Comment No 15* para 34.

accessible for both present and future generations".[167] The adequacy of food is connected to climatic and ecological conditions, while sustainability is described as incorporating "long-term availability and accessibility".[168] The Committee thus understands that the long-term and progressive realisation of the right to adequate food is connected to environmental considerations and emphasises that States Parties should ensure "the most sustainable management and use of natural and other resources for food".[169] In its statement regarding the world food crisis, the Committee also notes that strategies to combat climate change should not negatively affect the right to food, but should "promote sustainable agriculture".[170]

The environmental sustainability of approaches to the right to food are integrally linked to the progressive realisation of the right. The Committee has expressed concern regarding the long-term realisation of the right to food in its concluding observations where it has recommended the promotion of "environmentally sustainable eating habits";[171] long-term strategies for sustainable food production;[172] and building the resilience of agriculture to environmental shocks.[173] The Committee has also expressed concern regarding the "long-lasting and hazardous impact" of the use of herbicides on the soil and the productivity of crops in Gaza, recommending an assessment of the impact of such activities on livelihoods, health, food security and the environment.[174] On the basis of the precautionary principle the Committee also recommended that the spraying of herbicides cease while the relevant impact assessment is conducted.[175] The Committee recognises that the right to adequate food cannot be realised into the future if methods to realise the right are not environmentally sustainable.

The Committee has also expressed concern regarding future impacts and threats to ESCRs from environmental harm which should be prevented in order to ensure progressive realisation of Covenant rights. This is evident in the Committee's statement on climate change which is largely concerned with the vast extent of future risks, although it recognises that ESCRs are already being affected by climate change.[176] The Committee notes that

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[167] CESCR *General Comment No 12* para 7.
[168] Para 7.
[169] Para 25.
[170] CESCR *The World Food Crisis* para 13.
[171] CESCR *Lithuania* (2014) para 19.
[172] CESCR *Jamaica* (2013) para 26.
[173] CESCR *Guinea* (2020) para 40(c) with reference to target 1.5 of the Sustainable Development Goals.
[174] CESCR *Concluding Observations, Israel* (12 November 2019) E/C12/ISR/CO/4 para 44-45.
[175] CESCR *Israel* (2019) para 45.
[176] CESCR *Climate Change and the International Covenant on Economic, Social and Cultural Rights* (31 October 2018) E/C12/2018/1 para 4.

climate change will affect a number of ESCRs "at an increasing pace in the future".[177] In its statement in relation to the COVID-19 pandemic, the Committee also urges States Parties to promote scientific research "to learn lessons and increase preparedness for possible pandemics in the future".[178] This confirms that the Committee is concerned with the continued realisation of the Covenant over time, encouraging appropriate preparation and present-day action in order to address risks and impacts that have not yet materialised.

In its concluding observations the Committee has recommended that States Parties take action to prevention the future occurrence of harm, particularly where such harm has already occurred in the past. For example, in response to damage to homes resulting from gas extractions in the Netherlands, the Committee recommended the State Party take measures not only to remedy the damage done, but to "prevent future occurrences of damages related to gas extractions".[179] Similarly, in relation to a waste management crisis in Lebanon, the Committee recommended that the State Party take measures "to prevent future waste management crises, in view of their potentially hazardous impact on health".[180] In the latter case the Committee also recommended investment in infrastructure for water and sanitation as well as the independent monitoring of the provision of water, sanitation and waste management services.[181] In relation to Gambia the Committee proposed planning for future environmental impacts when it recommended that the State Party "[a]dopt effective measures to address the adverse impact of changes in rainfall patterns on the right to adequate housing".[182] It is clear then, that the progressive realisation of ESCRs over the long term necessitates a future-oriented view that will invariably implicate environmental factors. In a number of instances this long-term perspective has also expressly included the consideration of future generations.

In order for the realisation and enjoyment of ESCRs to be maintained, and even improved, over the long-term it is essential to consider the environmental dimensions and sustainability of measures taken by States Parties. The failure to do so will likely lead to unsustainable practices and policies that undermine efforts to realise ESCRs by resulting in retrogression or backwards steps.[183] While the Committee's references to sustainability have been somewhat inconsistent, a more deliberate application of the concept combined with a clearer

[177] CESCR *CC and the ICESCR* para 4.
[178] CESCR *Statement on the Coronavirus Disease (COVID-19) Pandemic and Economic, Social and Cultural Rights* (6 April 2020) E/C12/2020/1 para 23.
[179] CESCR *Concluding Observations, The Netherlands* (23 June 2017) E/C12/NLD/CO/6 para 12.
[180] CESCR *Lebanon* (2016) para 55.
[181] CESCR *Lebanon* (2016) para 55.
[182] CESCR *Concluding Observations, Gambia* (20 March 2015) E/C12/GMB/CO/1 para 24.
[183] The relationship between retrogression and unsustainable measures is discussed at 6 4 3 below.

definition is vital for incorporating environmental considerations within the long-term planning required by progressive realisation.

The work of the former Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Catarina de Albuquerque demonstrates how sustainability is related to the notion of progressive realisation. In 2013 the Special Rapporteur submitted a report to the UN Human Rights Council focusing on "sustainability in realizing the human rights to water and sanitation".[184] The report emphasises the importance of sustainability for human rights, particularly in relation to progressive realisation.[185] The report describes sustainability as intimately connected to progressive realisation:

> "In order for services to be sustainable, they must be available and accessible to everyone on a continuous and predictable basis, without discrimination. There must be 'permanent beneficial change' that flows from quality services and sustained behavioural change, or, in human rights terms, progressive realization towards fully realizing the human rights to water and sanitation for everyone. Once services and facilities have been improved, the positive change must be maintained and slippages or retrogression must be avoided. Services must be available for present and future generations and the provision of services today should not compromise the ability of future generations to realize the human rights to water and sanitation".[186]

In this description the Special Rapporteur's understanding of sustainability has significant overlap with progressive realisation. The distinction is perhaps that progressive realisation has often focused on the need to continuously *improve*, while sustainability seeks to continuously *maintain* provision of services, ensuring that any improvements can be sustained over the long term. The Special Rapporteur's report is critical of approaches that incentivise quick solutions that are unsustainable.[187] Sustainability is described by the Special Rapporteur as: a human rights principle grounded in sustainable development;[188] "a direct counterpart to retrogression";[189] entailing respect for the natural environment and a balance of economic and social dimensions;[190] and requiring strategic planning that

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[184] UNHRC *Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation* (2013) A/HRC/24/44 para 1.
[185] Para 9-12.
[186] UNHRC *Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation* (2013) A/HRC/24/44 para 20 (footnotes omitted).
[187] Para 4. See also para 79. The report refers to the failure of the Millennium Development Goals to ensure sustainable solutions as the goals focused on those who gained access to water and sanitation, but overlooked all those who lost access due to unsustainable methods.
[188] UNHRC *Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation* (2013) A/HRC/24/44 para 18-19.
[189] Para 20. The relationship between retrogression and sustainability is discussed in further at 6 4 3 below.
[190] Para 21.

includes ongoing risk assessment, financing services and systems across their full life cycle,[191] as well as accountable governance.[192]

The Special Rapporteur demonstrates how environmental considerations can be integrated into the interpretation of progressive realisation through emphasising the need to ensure that the realisation of ESCRs is effective and sustained over the long term. Adopting a clear and comprehensive framework for sustainability as a "human rights principle fundamental to the realization of human rights" and "non-dissociable from human rights law" is a potentially valuable mechanism to support progressive realisation in the Covenant.[193]

Progressive realisation in article 2(1) must be interpreted in light of current environmental crises and challenges to sustainable development. An appropriately effective and evolutive interpretation of progressive realisation must include the integration of environmental considerations, of which sustainability is an integral part. The long-term and future-oriented dimension of progressive realisation and the environment also requires the consideration future generations who are often the most vulnerable to environmental degradation and the impacts of climate change. The position of future generations in the progressive realisation of Covenant rights is considered below.

6 3 3 2 The place of future generations under the Covenant

The conscious integration of environmental considerations within the Covenant has inevitable benefits for future generations who would suffer the consequences of climate change and long-term environmental degradation.[194] Future generations are therefore implicit in long-term measures towards the progressive realisation of ESCRs, particularly in relation to the environment. The section below examines the Committee's current references to future generations and their position under the Covenant. Following this, the potential for the explicit recognition of future generations' rights is investigated, with reference to philosophical and theoretical approaches in this regard as well as to the interpretation of the Covenant. The latter investigation is split in two, first exploring possibilities for the recognition of future generations under the Covenant, and secondly exploring possibilities for the scope of obligations towards future generations.

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[191] UNHRC *Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation* (2013) A/HRC/24/44 para 22.
[192] Para 23.
[193] Para 9.
[194] See, for example, B Lewis "The Rights of Future Generations within the Post-Paris Climate Regime" (2018) 7 *Transnational Environmental Law* 69 76-77.

6 3 3 2 1 The Committee's current approach to future generations

One of the earliest references to future generations by the Committee appears in General Comment 12 in relation to the right to food. As noted above, this general comment refers to sustainability as "intrinsically linked to the notion of adequate food or food security, implying food being accessible for both present and future generations".[195] Further in relation to the right to food, the Committee's statement in the context of the Rio+20 conference emphasises the obligation of States Parties to "avoid adverse environmental effects on the right to food", noting the adverse impacts of land grabbing and overexploitation of fisheries which "gravely affect the livelihood of present and future generations".[196] General Comment 12 therefore establishes that the Committee deems the livelihoods of future generations as worthy of consideration in the context of the realisation of ESCRs.

General Comment 15 on the right to water similarly affirms a link between adequacy and sustainability, requiring the realisation of the right "for present and future generations".[197] The right to water also places an obligation on States Parties to adopt strategies and programmes to ensure that there is "sufficient and safe water for present and future generations".[198] It is clear that the Committee envisages environmental considerations as integral to such strategies and programmes as it makes explicit reference to "reducing depletion of water resources through unsustainable extraction, diversion and damming"; "reducing and eliminating contamination of watersheds and water-related ecosystems"; and "assessing the impacts of actions that may impinge upon water availability and natural-ecosystems watersheds, such as climate change, desertification and increased soil salinity, deforestation and loss of biodiversity".[199] Securing the right to water for future generations therefore must include environmental protection. The former Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Catarina de Albuquerque affirmed the relationship between sustainability and future generations, and noted that the provision of water and sanitation services must be ensured for present and future generations.[200]

In other contexts, the relationship between future generations and the environment is less evident. In General Comment 19 the Committee mentions future generations in the context of the right to social security, requiring States Parties to ensure that schemes to implement

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[195] CESCR *General Comment No 12* para 7. See 6 3 3 1 above.
[196] CESCR *Statement in the Context of the Rio+20 Conference on "The Green Economy in the Context of Sustainable Development and Poverty Eradication"* (4 June 2012) E/C12/2012/1 para 6(d).
[197] CESCR *General Comment No 15* para 11.
[198] Para 28.
[199] Para 28.
[200] UNHRC *Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation* (2013) A/HRC/24/44 para 11, 20 & 85.

the right are sustainable "in order to ensure that the right can be realized for present and future generations".[201] General Comment 21 recognises the relationship between cultural rights and future generations, and places an obligation on States Parties to respect and protect cultural heritage by ensuring it is "preserved, developed, enriched and transmitted to future generations".[202] Although these examples do not refer to environmental concerns, they do serve to support the argument that future generations are a relevant consideration in respect of ESCRs.

In General Comment 25 the Committee requires the use of the precautionary principle where an action or policy "may lead to unacceptable harm to the public or the environment", noting that such harm includes harm that is inequitable to present or future generations.[203] This is particularly significant for understanding intergenerational equity in the context of the Covenant as it suggests that the burden of activities undertaken today must be equitably distributed between present and future generations. It also suggests a responsibility on the present generation to take precautionary action to prevent potentially severe environmental harm.[204] Referring more broadly to methods of implementing ESCRs, the Committee's statement in respect of the 2030 Agenda notes the obligation on States Parties to ensure that sustainable methods are used to fulfil ESCRs in order to "ensure that the rights are secured both for present and future generations".[205] This once again affirms that the realisation of ESCRs for future generations should, at the very least, be a relevant consideration in States Parties' pursuit of the progressive realisation of Covenant rights.

References to future generations in the Committee's concluding observations are rare. In recent years, in relation to fracking and extractive activities, the Committee's concluding observations in respect of both Ecuador and Argentina have noted with concern the negative impact of these activities on climate change and "on the enjoyment of economic and social rights by the world's population and future generations".[206] Here the Committee illustrates that environmental impacts from these activities are relevant not only for the State Party's population, but for the population of the world, including future generations. This indicates a growing appreciation by the Committee for the wide reach of environmental impacts across

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[201] CESCR *General Comment No 19* para 11.
[202] CESCR *General Comment No 21* para 50(a).
[203] CESCR *General Comment No 25* para 56. Here the Committee refers to a definition from The United Nations Educational, Scientific and Cultural Organization ("UNESCO"). See UNESCO World Commission on the Ethics of Scientific Knowledge and Technology "The Precautionary Principle" (2005) *UNESCO* <https://unesdoc.unesco.org/ark:/48223/pf0000139578> (accessed 08-11-2020) 14.
[204] See Chapter 4, 4 3 2 4 in relation to precautionary action.
[205] CESCR *The Pledge to Leave No One Behind: The ICESCR and the 2030 Agenda* para 12(e).
[206] CESCR *Ecuador* (2019) para 11; CESCR *Argentina* (2018) para 13.

space and time, and therefore the need for these to be considered in measures to progressively realise ESCRs.

While the Committee does not explicitly recognise the rights of future generations, it is evident that it views future generations as a relevant consideration for the realisation of Covenant rights. The section below investigates how future generations can be recognised under the Covenant.

6 3 3 2 2 Recognising future generations under the Covenant

This section reflects on how the recognition of future generations' rights under the Covenant can be understood. It begins with an examination of the nature of future generations. This is followed by an analysis of some of the theoretical and philosophical justifications (and challenges) related to bestowing human rights on future generations. The section concludes with consideration of the extent to which the rights of future generations should be recognised under the Covenant.

Before considering some of the philosophical justifications for the recognising the human rights of future generations, it is important to consider the nature of "future generations". The term "future generations" is broadly used to refer to all persons who are not yet born. There is, however, no single abstract future generation. Instead, future generations are made up of a continuous string of human beings being born in an "ongoing social complex of partially overlapping lives".[207] It is perhaps more concrete to conceptualise future generations not in terms of an abstract future, but rather in relation to those children who will be born tomorrow, and their future children and grandchildren.

It is therefore useful to consider the role of children's rights in relation to the future. Whether or not legal obligations towards future generations are recognised, States Parties to human rights instruments have existing obligations towards children alive today, including those who have just been born. Düwell and Bos argue that this obligation extends to the future needs of children alive today who require protection as a result of "their incapacity to anticipate their future needs and in particular to claim what now needs to be done to secure them as vulnerable future adults".[208] For example, education serves as an important link between generations. The UN Secretary General's report on intergenerational solidarity recognises the role of education as "critical to intergenerational solidarity" through

[207] Düwell & Bos (2016) *Journal of HR* 243-244. See also K Woods "The Rights of (Future) Humans qua Humans" (2016) 15 *Journal of Human Rights* 291 299; A Gosseries "On Future Generations' Future Rights" (2008) 16 *Journal of Political Philosophy* 446-474.
[208] Düwell & Bos (2016) *Journal of HR* 239.

transmitting knowledge to future generations.[209] The human rights obligations of States Parties in relation to today's children requires a future-oriented perspective that ensures their rights are realised both now and throughout their lifespan.

It is also useful to note that cultural communities have a lifespan that extends beyond that of any individual and that impacts those who are not yet born. In General Comment 21 the Committee describes "cultural life" in article 15 of the Covenant as "an explicit reference to culture as a living process, historical, dynamic and evolving, with a past, a present and a future".[210] The Committee confirms that the Covenant requires cultural heritage to be protected for the sake of future generations.[211]

The rights to culture and education illustrate the "social complex of partially overlapping lives" that Düwell & Bos describe.[212] Human rights, and ESCRs in particular, must be acquired for all. Any separation between the current generation and future generations is, in reality, tenuous as a new generation is constantly being born. The former Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Catarina de Albuquerque noted that "the spirit of all international human rights instruments is 'intergenerational': human rights instruments do not have expiration dates".[213]

Given the nature of future generations, the forward-looking dimension of progressive realisation, and the inclusion of the rights to education and culture in the Covenant, it is difficult to justify an interpretation of ESCRs that does not consider and provide for those who are not yet born. It is evident that planning for the progressive realisation of, for example, healthcare cannot exclude the needs that will arise when new children are born. Similarly, progressive realisation of the right to education cannot exclude planning for those children who will inevitably enter the schooling system, even if they are not yet born. As will be argued below, future generations should therefore be taken into account in measures towards the progressive realisation of ESCRs.

Turning to the theoretical justifications for the human rights of future generations, it has been argued that future generations should not be considered bearers of human rights as they are not yet born and human rights can only be conferred on human beings who currently

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[209] UNGA *Intergenerational Solidarity and the Needs of Future Generations: Report of the Secretary-General* (15 August 2013) A/68/322 para 27.
[210] CESCR *General Comment No 21* para 11.
[211] CESCR *General Comment No 21* para 50(a).
[212] Düwell & Bos (2016) *Journal of HR* 243-244.
[213] UNHRC *Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation* (2013) A/HRC/24/44 para 11.

exist.[214] Others have relied on what is called the "non-identity problem" to refute any claim of rights for future generations.[215] Lewis summarises the non-identity problem as follows:

> "[T]his problem flows from a recognition that our actions today not only influence the lives of persons in the future but also determine which people will exist in the future. It is therefore not possible to say that current actions harm or benefit future people because, were those actions to change, those persons would never exist".[216]

However, the recognition that the precise identity of future people is not yet known does not mean that such persons will not exist. Many have argued that the simple fact of the existence of human beings in the future is sufficient to establish that such future generations will have human rights.[217] Woods argues that any defence of the universality of human rights must accept that human rights are extended "to all those who meet the moral criteria of being 'human'".[218] This would include those who are not yet born but whose humanity is certain. Düwell and Bos argue that obligations to future generations exist as a result of the humanity of these future people and the impact that our actions will have on their human rights.[219]

The debate regarding the nature of the human rights of future generations is ongoing. Regardless of whether such rights are expressly recognised, many argue that it is still possible to establish human rights obligations towards future generations.[220] Lewis argues that the basis for extraterritorial human rights obligations is analogous to obligations towards future generations. The obligations of States Parties have been interpreted to extend beyond those within the physical territory to include "any person who is under the control of a State or affected by the operation of its laws".[221] Lewis therefore suggests that "where a State has the ability to affect the rights of a person (be they currently alive or not yet born) then it is argued that the State must exercise that power in a way which is consistent with human rights".[222] The argument is that if States Parties' obligations extend to extraterritorial impacts

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[214] B Lewis "Human Rights Duties towards Future Generations and the Potential for Achieving Climate Justice" (2016) 34 *Netherlands Quarterly of Human Rights* 206 213; UNGA *Intergenerational Solidarity and the Needs of Future Generations* (2013) A/68/322 para 19.
[215] D Parfit *Reasons and Persons* (1984) 351-377. See also Lewis (2016) *Netherlands Quarterly of HR* 214; Woods (2016) *Journal of HR* 297; UNGA *Intergenerational Solidarity and the Needs of Future Generations* (2013) A/68/322 para 20.
[216] Lewis (2016) *Netherlands Quarterly of HR* 214.
[217] Riley (2016) *Journal of HR* 273-274; Woods (2016) *Journal of HR* 293; Düwell & Bos (2016) *Journal of HR* 233 & 238; Lewis (2016) *Netherlands Quarterly of HR* 214-215; Lewis (2018) *Transnational Environmental Law* 83.
[218] Woods (2016) *Journal of HR* 293. See also Riley (2016) *Journal of HR* 274.
[219] Düwell & Bos (2016) *Journal of HR* 238.
[220] See UNGA *Intergenerational Solidarity and the Needs of Future Generations* (2013) A/68/322 para 21 which states that "the link between rights and duties is not iron-clad, so that it is conceivable that persons can be subject to duties without the strict requirement of a corresponding rights-holder".
[221] Lewis (2016) *Netherlands Quarterly of HR* 217. See also "Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights" (2011) 29 *Netherlands Quarterly of HR* 578-590.
[222] Lewis (2016) *Netherlands Quarterly of HR* 217.

on human rights, then, by the same logic, they should also extend to extratemporal impacts. Düwell and Bos argue that obligations towards future generations can also be understood in terms of the future of the state itself.[223] As the lifespan of a state extends beyond that of the individuals within its jurisdiction and has a future beyond the embodied government, the authors suggest that the state has a responsibility towards all its citizens, both present and future.[224]

The Committee's current approach to future generations has not explicitly recognised the full ESCRs of future generations in the present. It is interesting to note that the rights in the Covenant "derive from the inherent dignity of the human person".[225] This limits the recipients of Covenant rights to "the human person" and could be interpreted to suggest that the rights of future generations are not included therein. However, there is no doubt that future generations of "human persons" will, in future, be bearers of ESCRs under the Covenant. Accepting that future generations will have rights means that these future rights are a relevant consideration in determining how present day ESCRs are progressively realised over the long term. This, in turn, establishes present-day obligations on States Parties that relate to the future rights of future generations.

As demonstrated by the discussion above, the Committee has clearly affirmed that future generations have relevance for the realisation of ESCRs today.[226] The Committee has not yet clarified the nature of States Parties' obligations towards future generations or how these should be understood or protected. Whether or not the human rights of future generations are expressly recognised, it is clear that they are relevant for how ESCRs are progressively realised. Riley notes, for example:

> "While we may or may not be able to have contractual or rights-based relationships with members of future generations, we are certainly able and required to include the interests of future generations (whatever their nature and status) within our constitutional designs".[227]

Similarly, States Parties seeking to give effect to the rights in the Covenant should, at the very least, ensure that their policies and programmes take future generations into account. In light of the existing references to future generations in the Committee's work the Covenant can, and should, be interpreted to include future generations as a necessary consideration in the determination and development of States Parties' measures towards the progressive realisation of ESCRs. A teleological interpretation of the Covenant and of progressive

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[223] Düwell & Bos (2016) *Journal of HR* 243.
[224] Düwell & Bos (2016) *Journal of HR* 243.
[225] ICESCR preamble.
[226] See 6 3 3 2 1 above.
[227] Riley (2016) *Journal of HR* 276.

realisation cannot exclude an obligation to consider and plan for the future ESCRs of the State Party's (future) population as this would defeat the objectives of progressive realisation and render any future planning meaningless.[228]

6 3 3 2 3 The scope of Covenant obligations towards future generations

Once it is established that the rights of future generations are relevant for the progressive realisation of ESCRs, it is necessary to reflect on how these considerations can be taken into account and balanced with the rights of the current generation. Put differently, how can States Parties ensure that the progressive realisation of ESCRs takes proper account of future generations without unfairly constraining the rights of the current generation? This is the central project of intergenerational equity.[229] In order to answer this question, it is important to determine the scope of States Parties' obligations towards future generations. It is helpful to begin by investigating the needs and interests of future generations.

As discussed in Chapter 4 above, Brown Weiss views intergenerational equity as a generational partnership with three central principles: (1) comparable options, which requires the conservation of diversity in natural resources; (2) comparable quality, which entails ensuring that for each generation the environment is of a comparable quality to that enjoyed by the previous generation; and (3) comparable access requiring equitable and non-discriminatory access to the use and benefit of the Earth's resources.[230] While these principles are a useful guide for determining the needs and interests that should be protected for future generations, the precise parameters of future needs can be difficult (and perhaps impossible) to establish.[231] There is, for example, a problem of variable standards between generations. Woods notes the "uncertainty about how, precisely, future generations will understand their own interests".[232] Technological developments also influence the resources that may be needed in future. However, there are certain aspects of future needs that are certain and should be protected. Woods explains:

> "[W]hile we cannot know precisely what future generations will need to be able to fulfil their rights obligations, we can be pretty certain that they will not be able to fulfil those obligations without such basic environmental goods as breathable air, drinkable water, sufficient carbon sinks, enough biodiversity to sustain ecological systems and support food supply chains".[233]

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[228] Teleological interpretation is examined at Chapter 3, 3 3 2 3 and 3 3 3 2.
[229] See Chapter 4, 4 3 1 4 in relation to intergenerational equity.
[230] E Brown Weiss "Climate Change, Intergenerational Equity, and International Law" (2008) 9 *Vermont Journal of Environmental Law* 615 616. See also Lewis (2018) *Transnational Environmental Law* 84; UNGA *Intergenerational Solidarity and the Needs of Future Generations* (2013) A/68/322 para 24. See also Chapter 4, 4 3 1 4 above.
[231] UNGA *Intergenerational Solidarity and the Needs of Future Generations* (2013) A/68/322 para 22.
[232] Woods (2016) *Journal of HR* 300.
[233] Woods (2016) *Journal of HR* 300.

Düwell and Bos similarly argue that, although many aspects of life and society will be regulated by future generations themselves and in ways that we cannot predict, there are still actions that the current generation takes which result in changes that threaten the most basic needs of future generations.[234] Düwell and Bos note that, regardless of how future people conceptualise their lives and their needs, it is certain that "they will need a safe environment and fresh air in order to realize whatever life projects they want to realize".[235] Current generations should therefore ensure that "environmental conditions do not impede the fulfilment of other rights".[236] These basic environmental conditions are of course integral to the fulfilment of many ESCRs, particularly the right to an adequate standard of living and the right to health.

There are various proposals for how the rights of future generations can be protected. Lewis suggests that a helpful starting point is to gain a better understanding of the impacts of present-day actions on future generations.[237] If we establish as far as possible the nature of the risks and impacts associated with actions taken today, then we are in a better position to compare outcomes and weigh the relative costs.[238] The UN Secretary-General, in a report entitled *Intergenerational Solidarity and the Needs of Future Generations* has suggested that, at the very least, the development of policies should consider "minimizing harm and doing that which benefits both present and future generations".[239] This would have to include the avoidance of irreversible impacts on essential ecosystems that support human life.[240] The report also suggests that incorporating the needs of future generations requires policy choices "that work to the advantage of both present and future generations" with as little burden on the present generation as possible, unless there are clear risks and consequences for future generations that must be avoided.[241] Lewis notes that "small gains for present generations should not be pursued where they would be likely to result in major losses for future generations".[242] Similarly, where significant gains are possible for future generations with minimally detrimental impacts for present generations, these should be considered. However, it is often the case that environmental protection and sustainable

[234] Düwell & Bos (2016) *Journal of HR* 245.
[235] Düwell & Bos (2016) *Journal of HR* 245.
[236] Woods (2016) *Journal of HR* 300.
[237] Lewis (2018) *Transnational Environmental Law* 85. See also UNGA *Intergenerational Solidarity and the Needs of Future Generations* (2013) A/68/322 para 17.
[238] Lewis (2018) *Transnational Environmental Law* 85.
[239] UNGA *Intergenerational Solidarity and the Needs of Future Generations* (2013) A/68/322 para 25.
[240] Para 25.
[241] Para 26.
[242] Lewis (2018) *Transnational Environmental Law* 85.

approaches to human rights will have benefits for both present and future generations. As Shue argues, "[t]he best protections for human rights are protections that endure".[243]

Although it is possible to develop approaches to human rights fulfilment that benefit both present and future generations, conflicts between generational interests is inevitable. Any recognition of the needs and interests of future generations inevitably raises the question of how conflicts with the rights of the current generation should be resolved. Lewis argues that human rights fail to protect future generations sufficiently as any limitation of their rights can be justified under human rights law if the limitation aims to protect the human rights of the present generation.[244] In addition, the precise scope and nature of obligations towards future generations is less defined and further obfuscated by the difficulties of demonstrating uncertain future impacts and causal links to the conduct in question.[245]

Düwell and Bos propose setting human rights priorities in order to distinguish the importance and urgency of relevant rights.[246] Recognising that any hierarchy of individual rights undermines the framework of human rights, Düwell and Bos argue that a set of principles are needed in order to guide decision-makers in the exercise of weighing the rights of the current generation against those of future generations.[247] Unfortunately, the authors do not offer any suggestions for such principles.

It is recommended that any conflict between the rights of present and future generations should include a consideration of the following factors: (1) the extent to which basic subsistence is threatened; (2) the proportionality of benefits to one generation at the expense of another; and (3) the extent to which irreversible impacts are threatened. Regarding the first factor, wherever basic subsistence is threatened for either present or future generations, States Parties should prioritise action to prevent any such harm. Secondly, where negligible harm to the current generation will have significant benefits for future generations, this would be justified. And finally, where any irreversible impacts might occur, these should be avoided wherever possible. In this regard the UN Secretary-General's report on intergenerational solidarity points out that "the conventional cost-benefit

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[243] Shue (2014) *JHRE* 60.
[244] ICESCR article 4; Lewis (2018) *Transnational Environmental Law* 82. For further discussion on limitations under the Covenant, see 6 4 2 below.
[245] Lewis (2018) *Transnational Environmental Law* 81.
[246] Düwell & Bos (2016) *Journal of HR* 248.
[247] Düwell & Bos (2016) *Journal of HR* 248.

rationale is unsuitable for the valuation of irreversibilities".[248] Additional factors or principles for weighing the rights of current and future generations need to be developed.

The tension between the interests of present and future generations is usefully illustrated by Shue in relation to climate change and energy policy. Shue recognises that while carbon emissions are a significant threat to future generations, access to affordable energy sources is essential for human rights.[249] In balancing the needs of present and future generations it is useful to distinguish between what Shue refers to as "subsistence emissions" and "luxury emissions".[250] Shue argues that if human rights are to offer protection from deprivation of subsistence needs,[251] then there are two important consequences for energy policy: first, climate change that results in a deprivation of subsistence rights must be prevented and, secondly, current energy sources essential for basic necessities should not be removed unless people are supplied with "alternative sources that are enough and as good".[252] It must be noted here that Shue's example relates to a conflict between the *interests* of the current generation and the *rights* of future generations. The "luxury emissions" to which he refers cannot be seen as a right.

In any event, it is evident that an energy policy that promotes luxury emissions of the current generation at the expense of the subsistence needs of future generations would be inconsistent with human rights. It is of course true that each specific instance of conflict between the rights of the current generation and the rights of future generations will have to be considered according to the particular facts and circumstances. Given the complexity of ecological processes and the uncertainty of future impacts, this would require individuals with the necessary expertise to assess the effects and would also require an appropriate exercise of the precautionary principle.[253]

It is worth noting that Shue's argument, although not strictly a conflict of rights, demonstrates that intergenerational equity must be pursued in conjunction with

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[248] See UNGA *Intergenerational Solidarity and the Needs of Future Generations* (2013) A/68/322 para 31 which notes that "the conventional cost-benefit rationale is unsuitable for the valuation of irreversibilities".
[249] Shue (2014) *JHRE* 60.
[250] Shue (2014) *JHRE* 51 with reference to A Agarwal & S Narain *Global Warming in an Unequal World: A Case of Environmental Colonialism* (1991) 3 where the terms luxury emissions and survival emissions were first used.
[251] Shue includes the examples of adequate food, secure shelter and clean water as subsistence needs. See Shue (2014) *JHRE* 60-61.
[252] Shue (2014) *JHRE* 60-61. In relation to access to energy, it is interesting to note that the Committee's most 2020 concluding observations in respect of Belgium recommend that the State Party "ensure a minimum supply of energy". See CESCR *Concluding Observations, Belgium* (26 March 2020) E/C12/BEL/CO/5 para 42.
[253] Lewis (2018) *Transnational Environmental Law* 85. See Chapter 4, 4 3 2 4 in relation to the precautionary principle.

intragenerational equity, emphasising that the burdens of a transition away from unsustainable energy generation must be shared within the current generation.[254] The project of intergenerational equity must be coupled with intragenerational equity as "addressing the needs of future generations is not meaningful if delinked from addressing the needs of those living".[255] However, a future-oriented perspective that takes the environment into account and considers long-term environmental impacts can have significant benefits for the progressive realisation of ESCRs for both present and future generations.

The Committee has not yet clarified the scope of future generations' rights under the Covenant. While it has referred to future generations on a number of occasions, it is unclear to what extent future generations should be protected by the Covenant. What is clear is that future generations are a necessary and relevant consideration for States Parties in fulfilling their obligations under the Covenant.[256] States Parties are not obligated to fulfil the ESCRs of future generations, however they do have an obligation to take future generations into account and to protect the environmental base on which future ESCRs will depend. Ultimately, the progressive realisation of ESCRs must seek to address the needs of both present and future generations, with the understanding that a healthy environment is fundamental to both. The following section examines how a long-term, forward-looking approach to environmental considerations and future generations can be integrated within the obligation of progressive realisation with the guidance of the principles of IEL.

6 3 4 Progressive realisation, future generations and the principles of IEL

Once it has been established that progressive realisation requires a future-oriented perspective that emphasises the environmental sustainability of measures taken and that takes future generations into account, it is necessary to consider how this might be done. The environmental principles discussed in Chapter 4 can guide States Parties' steps towards progressive realisation to ensure that such steps can be maintained over the long term and can, as far as possible, protect the needs and interests of future generations. This can help ensure that the progressive realisation of ESCRs is not derailed by environmental degradation which may lead to retrogression or the violation of Covenant rights.

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[254] Shue (2014) *JHRE* 64. In relation to energy and a just transition, see UNGA *Interim Report of the Special Rapporteur on Extreme Poverty and Human Rights, Olivier De Schutter: The "Just Transition" in the Economic Recovery: Eradicating Poverty within Planetary Boundaries* (7 October 2020) A/75/181/Rev1 para 21-29.
[255] UNGA *Intergenerational Solidarity and the Needs of Future Generations* (2013) A/68/322 para 15.
[256] See 6 3 3 2 1 above.

The integration of environmental factors into decision-making, policies and approaches related to ESCRs is vital for securing effective progressive realisation. Without taking the environment into account, improvements in the level of attainment of ESCRs are at risk of falling short over the long term where they depend on a healthy environment or natural resources. Where the environment is actively incorporated and considered in measures taken towards progressive realisation, the resultant progress in ESCRs will protect the long-term enjoyment of those rights for the present generation. Progressive realisation therefore also requires the sustainable use of natural resources in order to ensure that levels of ESCRs are able to be maintained. Any appropriate integration of the environment will also protect the environmental base on which future ESCRs depend, thereby protecting the rights of future generations.

Article 2(1) states that each State Party must take steps to the maximum of its available resources "with a view to achieving progressively the full realization of the rights recognized in the present Covenant".[257] This phrase must be interpreted in light of present-day environmental conditions and in accordance with the purpose of effective realisation of ESCRs.[258] The "full realization" of Covenant rights should therefore be understood as including all aspects of ESCRs that can be achieved for all without transgressing planetary boundaries,[259] employing unsustainable methods, or causing the irreversible environmental harm, as this would ultimately put all ESCRs at risk. There is therefore an ecological ceiling that determines the threshold of "full realization" (and the goal of progressive realisation) under the Covenant.[260] In other words, the "full realization" of ESCRs should not be interpreted in such a way that the fulfilment of these rights would require an amount of natural resources or degree of environmental harm that cannot be sustained. Given the relevance of the environmental dimension, the interpretation of the scope of "full realization" of ESCRs will also need to adapt according to scientific developments, findings and predictions regarding the state of the environment.

While States Parties are permitted to grant more extensive forms of socio-economic provisioning than contemplated by Covenant obligations, a removal of any such additional

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[257] ICESCR article 2(1).
[258] See Chapter 3, 3 3 3 2 and 3 3 4 3 in relation to effectiveness and the evolutive approach to the interpretation of human rights treaties and the Covenant.
[259] See J Rockström, W Steffen, K Noone, Å Persson, FS Chapin III, EF Lambin, TM Lenton, M Scheffer, C Folke, HJ Schnellnhuber, B Nykvist, CA De Wit, T Hughes, S Van der Leeuw, H Rodhe, S Sorlin, PK Snyder, R Costanza, U Svedin, M Falkenmark, L Karlberg, RW Corell, VJ Fabry, J Hansen, B Walker, D Liverman, K Richardson, P Crutzen, JA Foley, "A Safe Operating Space for Humanity" (2009) 461 *Nature* 472.
[260] See Rockström et al (2009) *Nature* 472; K Raworth *Doughnut Economics: Seven Ways to Think Like a 21st Century Economist* (2017).

and unsustainable levels of provisioning would not amount to a retrogression, as it would extend beyond the scope of "full realization".[261] In some instances a removal of additional benefits may even be required if harm to the environment and ESCRs is caused. Shue's distinction between "luxury emissions" and "subsistence emissions" is a good illustration of this.[262] States Parties are permitted to use fossil fuels to generate energy to provide for the ESCRs of their populations (i.e. subsistence emissions). However, where a State Party has exceeded its obligations under the Covenant by providing non-essential access to energy at the expense of the climate (i.e. luxury emissions), the removal of such additional access could be required in the interests of climate change mitigation to the extent that it causes harm to ESCRs within the State Party or extraterritorially.[263] Put differently, States Parties should only allow harmful emissions from fossil fuels to the extent necessary for the realisation of ESCRs, and any additional access to energy could be provided from renewable energy sources.

The long-term and forward-looking perspective of progressive realisation and the needs and interests of future generations are unavoidably intertwined. The principle of intergenerational equity underscores the moral obligation on the present generation to consider the position of future people and the state of the environment they will inherit. As the Committee notes in General Comment 25, harm which is inequitable to present or future generations should be considered "unacceptable".[264] States Parties therefore have an obligation to consider the impact of their decisions and activities on the environment and the rights of future generations. States Parties should also adopt measures to reduce their impact on future generations and mitigate threats such as climate change. The UN Secretary General's report on intergenerational solidarity recognises the role of "long-term scientific research and development" for intergenerational solidarity, noting that this research "is necessary to develop substitutes for depleted resources, to extract and use resources more efficiently and to understand and manage long-term threats to environmental quality".[265] As noted above, intergenerational equity is particularly important where the survival and subsistence needs of future generations are at risk.[266]

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[261] In relation to retrogression see 6 4 below.
[262] Shue (2014) *JHRE* 51.
[263] See "Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights" (2011) 29 *Netherlands Quarterly of HR* 578-590. See also CESCR *CC and the ICESCR* para 7.
[264] CESCR *General Comment No 25* para 56.
[265] UNGA *Intergenerational Solidarity and the Needs of Future Generations* (2013) A/68/322 para 28.
[266] Future generations are discussed at 6 3 3 2 above.

Although it remains important to include the interests of unborn generations in measures taken towards the progressive realisation of ESCRs, this must be balanced with the ESCRs of the present generation and the need for intragenerational equity. Given the interdependent and global nature of environmental systems, a failure to consider sustainability and long-term environmental impacts in one State Party has important implications for other States Parties. Taking a long-term perspective of ESCRs and progressive realisation into account, intragenerational equity suggests that every State Party should ensure that measures taken in the pursuit of progressive realisation are sustainable and protect the environment. International assistance and cooperation under the Covenant must also include employing methods and practices that do not cause environmental damage to other States Parties; promoting the equitable distribution of environmental resources and burdens; and providing assistance to States Parties bearing the brunt of environmental harm. For example, the Committee has recommended that Bangladesh "strengthen international cooperation in order to mobilize the financial and technological support to which it is entitled in mitigating and responding to the effects of climate change".[267]

The interests of future generations add a further dimension to the obligation of international assistance and cooperation and the principle of CBDR. A failure to ensure intragenerational equity also means that the future generations within certain States Parties, such as small island developing states, will be born into dire circumstances and will bear a significantly disproportionate burden of environmental harm. Failures in intragenerational equity with respect to climate change may, for example, threaten the entire territory and existence of such States Parties, with devastating consequences for future generations.[268] Such circumstances will inevitably result in severe impacts on the progressive realisation of ESCRs within affected States Parties.[269]

Effective progressive realisation over the long term requires appropriate environmental protection measures. With reference to the preventive principle,[270] the prevention of environmental harm ensures that ESCRs can be progressively realised, while also

[267] CESCR *Concluding Observations, Bangladesh* (18 April 2018) E/C12/BGD/CO/1 para 14. See also CESCR *Concluding Observations, Mauritius* (5 April 2019) E/C12/MUS/CO/5 para 10.
[268] See, for example, M Wewerinke-Singh *State Responsibility, Climate Change and Human Rights under International Law* (2018)98-104; C Moore "Waterworld: Climate Change, Statehood and the Right to Self-Determination" in O Quirico & M Boumghar (eds) *Climate Change and Human Rights: An International and Comparative Law Perspective* (2017) 104 104-117.
[269] See, for example, *Concluding Observations, Mauritius* (5 April 2019) E/C12/MUS/CO/5 para 9-10; CESCR *CC and the ICESCR* para 1 & 4.
[270] See Chapter 4, 4 3 2 3 for a detailed discussion of the preventive principle.

protecting the ESCRs of future generations that depend on the natural environment. In accordance with the precautionary principle, it is essential to recognise that environmental impacts may have significant long-term effects, while others may be irreversible. This warrants the exercise of caution where uncertainty exists regarding the nature and extent of environmental impacts. In its general comment on science, the Committee affirms the importance of applying the precautionary principle where there is a risk of unacceptable harm to the public or the environment.[271]

The polluter pays principle requires those responsible for environmental pollution to bear the costs of clean up, rehabilitation and compensation for resultant environmental degradation.[272] Future generations should not be burdened with inequitable financial and environmental debt as a result of polluting activities that benefit certain members of the current generation.[273] Particularly in the case of private corporations, it is inconsistent with the Covenant to protect financial interests of polluters at the cost of the ESCRs of present and future generations that depend on a healthy environment. Effective implementation of the polluter pays principle can encourage business practices that support and enhance long-term progressive realisation of ESCRs. A failure to ensure comprehensive legislative and other measures to give effect to the polluter pays principle will result in significant public resources being directed towards clean-up and environmental rehabilitation. Those costs must come from the responsible entities and not cause an undue reduction in the available resources for the progressive realisation of ESCRs.[274] Where pollution comes from outside the affected State Party, international law must take the impacts on ESCRs into account in any determination of compensation. States Parties must also ensure that individuals and companies under their jurisdiction are held responsible for pollution that impacts on the territory of other States Parties.[275] This would also be consistent with the no-harm principle which prohibits transboundary environmental harm.

In conclusion, progressive realisation must include a future-oriented perspective that, in order to be meaningful and effective, takes the environment and future generations into account. This forward-looking dimension of progressive realisation can only be effective if

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[271] CESCR *General Comment No 25* para 56. The Committee's definition of unacceptable harm includes harm that is inequitable to present or future generations.
[272] The polluter pays principle is discussed in more detail at Chapter 4, 4 3 3.
[273] See Dowell-Jones "The Sovereign Bond Markets and Socio-Economic Rights" in *ESCR in International Law* 66; CESCR *General Comment No 25* para 56.
[274] For an example of the extensive damage and costs resulting from pollution see A Niranjan "Who will pay for the Mauritius oil spill?" (28-08-2020) *Deutsche Welle* <https://www.dw.com/en/mauritius-oil-spill-compensation-pay/a-54725675> (accessed 04-09-2020).
[275] See CESCR *General Comment No 24* para 38-57 in relation to remedies for harm caused in the context of business activities.

we recognise the critical role of the environment in the realisation of ESCRs and the risks posed by unsustainable and environmentally harmful practices. Environmental impacts also pose a severe risk to the rights of future generations. The interpretation in the Covenant of the concept of progressive realisation and its ultimate end-goal of the "full realization" of the rights recognised in the Covenant must accordingly incorporate environmental considerations and the rights of future generations if is to guarantee the sustainable enjoyment of the relevant rights now and in the future.

6 4 Non-retrogression

6 4 1 Introduction

Although the Covenant itself does not refer to retrogression, the duty to avoid retrogressive measures is an accepted corollary of the obligation of progressive realisation in article 2(1).[276] It is implicit in the obligation of progressive realisation that a decline in conditions should not be permitted.[277] According to Warwick, the concept of non-retrogression thus fills "a substantive and logical gap in the progressive realisation obligation".[278] In General Comment 3 the Committee notes that "any deliberately retrogressive measures […] would require the most careful consideration and would need to be fully justified by reference to the totality of the rights provided for in the Covenant and in the context of the full use of the maximum available resources".[279] The Committee has repeatedly noted that there is a strong presumption against retrogressive measures, and that State Parties will bear the burden of justifying such measures.[280] A step backwards or a failure to maintain the forward movement required by progressive realisation is therefore a retrogressive step or measure in violation of article 2(1) unless it can be justified according to the criteria established by the Committee.

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[276] CESCR *General Comment No 3* para 9. See also Sepúlveda *Nature of Obligations under the ICESCR* 319
[277] See also Sepúlveda *Nature of Obligations under the ICESCR* 319.
[278] BTC Warwick "Unwinding Retrogression: Examining the Practice of the Committee on Economic, Social and Cultural Rights?" (2019) 19 *Human Rights Law Review* 467 487.
[279] CESCR *General Comment No 3* para 9.
[280] CESCR *General Comment No 13* para 45; CESCR *General Comment No 14* para 32; CESCR *General Comment No 15* para 19; CESCR *General Comment No 17* para 27; CESCR *General Comment No 18* para 21; CESCR *General Comment No 19* para 42; CESCR *General Comment No 21* para 65; CESCR *General Comment No 22: The Right to Sexual and Reproductive Health (Article 12 of the Covenant)* (2 May 2016) E/C12/GC/22 para 38; CESCR *General Comment No 23* para 52; CESCR *General Comment No 25* para 24. See also Chairperson of the CESCR *Letter Dated 16 May 2012 Addressed by the Chairperson of the Committee on Economic, Social and Cultural Rights to States Parties to the International Covenant on Economic, Social and Cultural Rights* (16 May 2012) CESCR/48th/SP/MAB/SW; CESCR *Public Debt, Austerity Measures and the International Covenant on Economic, Social and Cultural Rights* (22 July 2016) E/C12/2016/1 para 4.

Young notes that this obligation of non-retrogression is a more fixed standard of accountability in contrast to the open-ended standard of progressive realisation.[281] Of course, in the context of the arguments made above, this dissertation argues that progressive realisation can only be seen as open-ended to the extent of the "full realization" of ESCRs, as interpreted according to planetary boundaries and environmental constraints.[282] The section below analyses the Committee's current interpretation of the duty to avoid retrogressive measures. This is followed by an examination of the environmental dimensions of retrogression, with reference to the principles of IEL.

6 4 2 Current interpretation of non-retrogression

It is important to begin by clarifying the terminology used by the Committee in relation to retrogression. The term "retrogressive measures" is most commonly used in the Committee's work to refer to instances of retrogression.[283] As some have noted, the Committee has also been known to discuss instances of retrogression without any clear reference to the term.[284] The Committee has also used the terms "regressive measures"[285] or "regression"[286] as well as "steps backwards".[287] From the context of their usage it is evident that in most instances the Committee uses these terms to refer to retrogression or retrogressive measures.

In General Comment 3 the Committee refers to "deliberately retrogressive measures".[288] This phrase is repeated in a number of subsequent general comments,[289] but the reference

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[281] K Young "Waiting for Rights: Progressive Realisation and Lost Time" in K Young (ed) *The Future of Economic and Social Rights* (2019) 654 659-660.
[282] See 6 3 4 above.
[283] CESCR *General Comment No 3* para 9; CESCR *General Comment No 13* para 45; CESCR *General Comment No 14* para 32; CESCR *General Comment No 15* para 19; CESCR *General Comment No 16* para 42; CESCR *General Comment No 17* para 27; CESCR *General Comment No 19* para 42; CESCR *General Comment No 21* para 65; CESCR *General Comment No 22* para 38; CESCR *General Comment No 23* para 52; CESCR *General Comment No 25* para 24. The Committee also refers to "retrogressive steps" in some instances. See CESCR *General Comment No 18* para 21; CESCR *An Evaluation of the Obligation to Take Steps to the "Maximum of Available Resources"* para 9-10.
[284] A Nolan "Putting ESR-Based Budget Analysis into Practice: Addressing the Conceptual Challenges" in A Nolan, R O'Connell & C Harvey (eds) *Human Rights and Public Finance: Budgets and the Promotion of Economic and Social Rights* (2013) 41 51-52. See also CESCR *Iceland* (2012) para 6.
[285] CESCR *General Comment No 21* para 46; CESCR *Concluding Observations, Benin* (27 March 2020) E/C12/BEN/CO/3 para 21; CESCR *Concluding Observations, Norway* (2 April 2020) E/C12/NOR/CO/6 para 38-39; CESCR *Spain* (2012) para 28. See also CESCR *General Comment No 11: Plans of Action for Primary Education (Article 14 of the International Covenant on Economic, Social and Cultural Rights)* (10 May 1999) E/C12/1999/4 para 7; CESCR *Spain* (2018) para 41 which refer to the regressive effect of certain measures.
[286] Chairperson of the CESCR *Letter Dated 16 May 2012 Addressed by the Chairperson of the Committee on Economic, Social and Cultural Rights to States Parties to the International Covenant on Economic, Social and Cultural Rights* (16 May 2012) CESCR/48th/SP/MAB/SW.
[287] CESCR *Spain* (2012) para 12; CESCR *Public Debt, Austerity Measures and the ICESCR* para 2.
[288] CESCR *General Comment No 3* para 9.
[289] CESCR *General Comment No 13* para 45; CESCR *General Comment No 14* para 32; CESCR *General Comment No 15* para 19; CESCR *General Comment No 17* para 27; CESCR *General Comment No 18* para

to "deliberate" measures or "deliberately" retrogressive measures is absent in the Committee's general comment on science[290] as well as its 2016 statement in relation to public debt and austerity measures, which has particular relevance for retrogression.[291] If the deliberate nature of retrogressive measures is accepted as a requirement despite these omissions, its meaning remains unclear. Sepúlveda suggests that it should be understood as requiring a step back in the level of protection as a result of "an intentional decision by the State".[292] However, as Warwick demonstrates, the deliberate nature of a State Party's conduct can be understood in two ways: a deliberate measure by a State Party can have a retrogressive effect (whether intended or not); or alternatively, a measure can be taken with the deliberate intention of a retrogressive effect.[293] This distinction has important implications for the culpability of States Parties as the standard of avoiding measures with unintended retrogressive effects is clearly higher than the avoidance of steps that are intentionally retrogressive.[294] The former Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Catarina de Albuquerque refers to acts and omissions that may have retrogressive effect even if they are not deliberately retrogressive.[295] However, the Committee has not addressed the meaning of this reference to deliberateness and this remains an aspect of the doctrine of non-retrogression in need of clarification.[296] It is recommended that retrogressive measures be treated as violations of the Covenant regardless of the State Party's intent, as this would be most consistent with a *pro homine* approach to interpretation.[297]

Returning to General Comment 3, in relation to the obligation of progressive realisation the Committee states that:

> "[A]ny deliberately retrogressive measures in that regard would require the most careful consideration and would need to be fully justified by reference to the totality of the rights provided for in the Covenant and in the context of the full use of the maximum available resources".[298]

21; CESCR *General Comment No 19* para 42; CESCR *General Comment No 21* para 65; CESCR *General Comment No 23* para 52. See also CESCR *The Pledge to Leave No One Behind: The ICESCR and the 2030 Agenda* para 12(c).

[290] CESCR *General Comment No 25* para 24.

[291] CESCR *Public Debt, Austerity Measures and the ICESCR* para 4 & 10. See also CESCR *General Comment No 22* para 38; CESCR *An Evaluation of the Obligation to Take Steps to the "Maximum of Available Resources"* para 9-10.

[292] Sepúlveda *Nature of Obligations under the ICESCR* 323.

[293] Warwick (2019) *HR Law Review* 475-476.

[294] Warwick (2019) *HR Law Review* 475-477.

[295] UNHRC *Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation* (2013) A/HRC/24/44 para 16.

[296] Nolan "Putting ESR-Based Budget Analysis into Practice" in *HR & Public Finance* 47. See also Warwick (2019) *HR Law Review* 475-478.

[297] See Chapter 3, 3 3 3 in relation to *pro homine* approach.

[298] CESCR *General Comment No 3* para 9.

This formulation of criteria for the justification of retrogressive measures is repeated in a number of subsequent general comments, usually prefaced by the statement that "[t]here is a strong presumption of impermissibility of any retrogressive measures"[299] and an assertion that States Parties bear the burden of proving that the abovementioned criteria have been met.[300] Placing this burden of proof on States Parties provides an important opportunity for the Committee to "distinguish between the inability and the unwillingness" of States Parties to meet their Covenant obligations.[301] The Committee also emphasises the need to protect those who are most vulnerable, noting that "even in times of severe resources constraints" States Parties must adopt "relatively low-cost targeted programmes" for those at risk.[302]

In later general comments the abovementioned formulation of non-retrogression in General Comment 3 has not been referred to in its entirety, although elements thereof still appear.[303] This change in formulation of retrogressive measures and criteria for their justification can be attributed to the evolution of the Committee's treatment of retrogressive measures through General Comment 19,[304] the Committee Chairperson's 2012 letter relating to austerity measures,[305] and the related statement on public debt and austerity from 2016.[306] These are discussed below.

In General Comment 19 the Committee echoed the approach set out in General Comment 3, affirming the presumption of the impermissibility of retrogression and the burden of proof on the State Party to show a careful consideration of alternatives, and justification with reference to the "totality of the rights provided for in the Covenant" and the full use of maximum available resources.[307] The Committee then sets out additional factors that will be considered:

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[299] See, for example, CESCR *General Comment No 13* para 45. See also Sepúlveda *Nature of Obligations under the ICESCR* 328.
[300] CESCR *General Comment No 13* para 45; CESCR *General Comment No 14* para 32; CESCR *General Comment No 15* para 19; CESCR *General Comment No 18* para 21; CESCR *General Comment No 19* para 42; CESCR *General Comment No 21* para 46. See Warwick (2019) *HR Law Review* 478-482 on the burden of proof for retrogressive measures.
[301] Müller (2009) *HR Law Review* 585.
[302] CESCR *General Comment No 3* para 12. See also CESCR *General Comment No 14* para 18; CESCR *General Comment No 15* para 13; CESCR *General Comment No 17* para 20; CESCR *General Comment No 18* para 12(b)(i); CESCR *General Comment No 21* para 23.
[303] See CESCR *General Comment No 22* para 38; CESCR *General Comment No 23* para 52; CESCR *General Comment No 25* para 24.
[304] CESCR *General Comment No 19* para 42.
[305] Chairperson of the CESCR *Letter Dated 16 May 2012 Addressed by the Chairperson of the Committee on Economic, Social and Cultural Rights to States Parties to the International Covenant on Economic, Social and Cultural Rights* (16 May 2012) CESCR/48th/SP/MAB/SW.
[306] CESCR *Public debt, austerity measures and the ICESCR*. See also CESCR *An Evaluation of the Obligation to Take Steps to the "Maximum of Available Resources"* para 10 with regard to the criteria considered under the OP-ICESCR where resource constraints are relied upon to justify retrogressive measures.
[307] CESCR *General Comment No 19* para 42.

> "The Committee will look carefully at whether: (a) there was reasonable justification for the action; (b) alternatives were comprehensively examined; (c) there was genuine participation of affected groups in examining the proposed measures and alternatives; (d) the measures were directly or indirectly discriminatory; (e) the measures will have a sustained impact on the realization of the right to social security, an unreasonable impact on acquired social security rights or whether an individual or group is deprived of access to the minimum essential level of social security; and (f) whether there was an independent review of the measures at the national level".[308]

These factors are reiterated in the Committee's later statement on public debt and austerity, specifically with reference to retrogressive measures impacting social security.[309] Although these factors apply to instances related to the right to social security, the Committee has recently referred to the requirements of consultation and independent review in relation to the impact of austerity measures on all ESCRs.[310] The criteria set out by the Committee in relation austerity measures are analysed below. It is apparent, however, that the requirements of consultation and independent review identified in General Comment 19 have been incorporated into the list of criteria that must be considered in relation to the justification of austerity measures.

Retrogression as a result of austerity measures was first addressed in the 2012 letter to States Parties from the Chairperson of the Committee.[311] Although it only made mention of "regression" once, the letter stated that, in the case of economic and financial crises, proposed policy changes or adjustments must meet the following requirements: the policy must be a temporary measure; the measure must be necessary and proportionate "in the sense that the adoption of any other policy, or a failure to act, would be more detrimental" to ESCRs; it must not be discriminatory and should "support social transfers to mitigate inequalities" and ensure there is no disproportionate impact on the disadvantaged and marginalised; and finally, the policy should identify and protect the minimum core content of ESCRs.[312] As Nolan has noted, this letter is not a general comment and is unlikely to have "the status of even soft law".[313] However, the Committee has since referred back to this letter and reiterated the criteria set out there on a number of occasions.[314] The

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[308] CESCR *General Comment No 19* para 42.
[309] CESCR *Public Debt, Austerity Measures and the ICESCR* para 4.
[310] CESCR *Ecuador* (2019) para 6(d); CESCR *Argentina* (2018) para 6(e). See also CESCR *The Pledge to Leave No One Behind: The ICESCR and the 2030 Agenda* para 12(c) which also incorporates the requirement of consultation.
[311] Chairperson of the CESCR *Letter Dated 16 May 2012 Addressed by the Chairperson of the Committee on Economic, Social and Cultural Rights to States Parties to the International Covenant on Economic, Social and Cultural Rights* (16 May 2012) CESCR/48th/SP/MAB/SW.
[312] Chairperson of the CESCR *Letter Dated 16 May 2012*.
[313] Nolan "Putting ESR-Based Budget Analysis into Practice" in *HR & Public Finance* 50.
[314] For references to the letter see CESCR *General Comment No 23* para 52; CESCR *Public Debt, Austerity Measures and the ICESCR* para 4; CESCR *Argentina* (2018) para 6(e); CESCR *Germany* (2018) para 17; CESCR *Concluding Observations, Bulgaria* (11 December 2012) E/C12/BGR/CO/4-5 para 11; CESCR

abovementioned criteria for retrogressive measures in the context of economic and financial crises have thus gained prominence in the Committee's work, particularly through their inclusion in the Committee's 2016 statement on public debt and austerity measures.[315] In the latter statement the Committee repeats the requirements set out in its 2012 letter and further notes that, where the right to social security is concerned, the factors set out in General Comment 19 also apply.[316] The Committee has also referred to these requirements in the context of the Optional Protocol to the ICESCR,[317] noting that "[i]n times of severe economic and financial crisis, all budgetary changes or adjustments affecting policies must be temporary, necessary, proportional and non-discriminatory". [318]

This analysis of the Committee's evolving doctrine on retrogression suggests that the factors or criteria considered in assessing a State Party's justification of retrogressive measures may be dependent on the particular circumstances. Different criteria will be considered where the State Party relies on resource constraints as a justification;[319] where the retrogression occurs as a result of economic or financial crises; [320] where the retrogression concerns the right to social security;[321] or where the retrogression does not relate to any of the aforementioned categories.[322] In practice, however, this approach is not straightforward. In many instances, for example, retrogressive measures will be taken in relation to social security, during an economic or financial crisis, and with the State Party relying on resource constraints as a result. This would then require the consideration of a long list of criteria, making the justification of such retrogressive measures notably complex.[323] Warwick argues that "a more holistic and purposeful approach is needed", proposing that such an approach should be centred on the purpose of the doctrine of non-

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Concluding Observations, New Zealand (31 May 2012) E/C12/NZL/CO/3 para 17. For references to the criteria see CESCR *General Comment No 22* para 38; CESCR *General Comment No 25* para 24; CESCR *Bulgaria* (2019) para 9; CESCR *Denmark* (2019) para 13; CESCR *Ecuador* (2019) para 6(e); CESCR *Concluding Observations, Sri Lanka* (23 June 2017) E/C12/LKA/CO/5 para 22; CESCR *Concluding Observations, France* (13 July 2016) E/C12/FRA/CO/4 para 24; *Djazia and Bellili v Spain* Communication No 5/2015, E/C12/61/D/5/2015 (2017) CESCR para 17.6. See also Nolan "Putting ESR-Based Budget Analysis into Practice" in *HR & Public Finance* 50-51.

[315] CESCR *Public Debt, Austerity Measures and the ICESCR* para 4.

[316] CESCR *Public Debt, Austerity Measures and the ICESCR* para 4.

[317] Optional Protocol to the International Covenant on Economic, Social and Cultural Rights (adopted 10 December 2008, entered into force 5 May 2013) A/RES/63/117.

[318] *Djazia and Bellili v Spain* Communication No 5/2015, E/C12/61/D/5/2015 (2017) CESCR para 17.6. See also S Liebenberg "Between Sovereignty and Accountability: The Emerging Jurisprudence of the United Nations Committee on Economic, Social and Cultural Rights under the Optional Protocol" (2020) 42 *Human Rights Quarterly* 48 75.

[319] CESCR *An Evaluation of the Obligation to Take Steps to the "Maximum of Available Resources"* para 10.

[320] CESCR *Public Debt, Austerity Measures and the ICESCR* para 4.

[321] CESCR *General Comment No 19* para 42.

[322] CESCR *General Comment No 3* para 9.

[323] See Warwick (2019) *HR Law Review* 480.

retrogression which is to fill a gap in relation to progressive realisation.[324] Warwick thus distils the approach into a two-stage enquiry.[325] The first stage is a strong prohibition of retrogression, emphasising that retrogressive measures are contrary to the obligation of progressive realisation. In order the rebut this presumption, the second stage then involves an assessment of the "exceptional circumstances" in the given case and the extent to which they permit retrogressive measures.[326]

Given that retrogression necessarily involves a diminishment of ESCRs, it is important to consider the relationship between retrogressive measures and limitations of ESCRs in terms of article 4 of the Covenant.[327] The Committee has paid significantly more attention to retrogression and the criteria for justifiable retrogressive measures than the nature and application of article 4 and the justifications required for an acceptable limitation to Covenant rights.[328] It is evident that the Committee prefers the approach of non-retrogression in relation to backwards steps but the reasons for this, and indeed the distinction between the two, remain unclear.

Some authors argue that a retrogressive measure can, and should, be distinguished from a limitation in accordance with article 4 of the Covenant. Sepúlveda suggests that retrogressive measures are not limitations of ESCRs and that article 4 therefore provides an additional enquiry, so that where "a retrogressive measure places a limitation on the rights, States must comply with the conditions set out in article 4 ICESCR".[329] Alston and Quinn suggest that the distinction between article 4 limitations and retrogressive measures is a difference between a "formal limitation" and "a general level of attainment" of rights.[330] They link a reduction in a general level of attainment to resource availability, explaining that such a reduction constitutes a retrogressive measure where it is attributed to a lack of resources.[331] Where resources are not at issue, Alston and Quinn propose that a limitation should be dealt with according to article 4. This seems to be consistent with the Committee's approach. As Müller argues, the Committee's development of criteria for retrogressive

[324] Warwick (2019) *HR Law Review* 486-487.
[325] 487.
[326] 487.
[327] Article 4 states that "[t]he States Parties to the present Covenant recognize that, in the enjoyment of those rights provided by the State in conformity with the present Covenant, the State may subject such rights only to such limitations as are determined by law only in so far as this may be compatible with the nature of these rights and solely for the purpose of promoting the general welfare in a democratic society".
[328] Nolan "Putting ESR-Based Budget Analysis into Practice" in *HR & Public Finance* 49.
[329] Sepúlveda *Nature of Obligations under the ICESCR* 332.
[330] Alston & Quinn (1987) *HR Quarterly* 205; Nolan "Putting ESR-Based Budget Analysis into Practice" in *HR & Public Finance* 49.
[331] Alston & Quinn (1987) *HR Quarterly* 205.

measures, and its discussion of these in relation to article 2(1), suggests that "the CESCR does not consider these 'retrogressive measures' to be 'limitations' within the meaning of Article 4 ICESCR".[332] However, as Müller notes, the reasonableness of this distinction "can be questioned".[333]

Noting the practical difficulties of distinguishing between retrogressive measures and limitations, Müller proposes "a unified standard […] for evaluating all limitations, including retrogressive measures" with reference to the criteria set out in article 4.[334] Müller illustrates that the criteria for retrogressive measures can be reframed according to the wording of article 4 without much difficulty as the differences between these criteria are minimal.[335] Assessing retrogressive measures under article 2(1) in accordance with the requirements of article 4 is therefore proposed as "a sensible and practical contextual relationship between Article 4 and Article 2(1) ICESCR".[336] Müller's approach does seem feasible and could afford some much needed structure to the doctrine of non-retrogression. However, it is evident from the Committee's emphasis on non-retrogression and the absence of reliance on article 4,[337] that the Committee supports the use of the criteria set out in its general comments and statements to assess States Parties' retrogressive measures.[338] It is interesting to note that the numerous references to article 4 in the Committee's general comment on science could indicate a more prominent role for article 4 limitations in future.[339] The Committee's views under the Optional Protocol similarly indicate greater reliance on article 4.[340] For now, however, the criteria developed by the Committee as set out above is the primary mechanism for assessing the justification of retrogressive measures.

As the corollary of progressive realisation, the prohibition of retrogression ensures that States Parties do not move backwards in the realisation of ESCRs. Where retrogressive

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[332] Müller (2009) *HR Law Review* 569. See also 584-585.
[333] Müller (2009) *HR Law Review* 569 & 585. See also Nolan "Putting ESR-Based Budget Analysis into Practice" in *HR & Public Finance* 49.
[334] Müller (2009) *HR Law Review* 585.
[335] 585-590.
[336] 591.
[337] See CESCR *General Comment No 7: The Right to Adequate Housing (Art 11.1 of the Covenant): Forced Evictions* (20 May 1997) E/1998/22 para 5; CESCR *General Comment No 13* para 42; CESCR *General Comment No 14* para 28-29; CESCR *General Comment No 17* para 22-24; CESCR *General Comment No 21* para 19; CESCR *Cameroon* (2019) para 65; CESCR *Concluding Observations, Vietnam* (15 December 2014) E/C12/VNM/CO/2-4 para 8.
[338] Müller (2009) *HR Law Review* 269.
[339] CESCR *General Comment No 25* para 21, 42, 44, 50, 52, 57, 68 & 86. See also CESCR *Statement on the Coronavirus Disease (COVID-19) Pandemic and ESCRs* para 11.
[340] See, for example, *Maribel Viviana López Albán v Spain* Communication No 37/2018, E/C12/66/D/37/2018 (2018) CESCR para 11.1; *SC and GP v Italy* Communication No 22/2017, E/C12/65/D/22/2017 (2019) CESCR para 9 & 11.2; *Rosario Gómez-Limón Pardo v Spain* Communication No 52/2018, E/C12/67/D/52/2018 (2020) CESCR para 9.4.

measures are taken, the burden is on the State Party to justify such measures due to exceptional circumstances with reference to the relevant criteria set out by the Committee. The appropriate integration of environmental considerations in the context of retrogression suggests that (1) retrogression due to environmental degradation should be avoided, and (2) retrogressive measures with the aim of protecting the environment may be justifiable. This relationship between retrogression and environmental considerations is discussed below.

6 4 3 Non-retrogression and the principles of IEL

It is important to begin by reiterating that retrogression must be understood in the context of the interpretation of "full realization" proposed above, taking planetary boundaries and environmental limits into account.[341] If the full realisation of ESCRs is understood as the ceiling of progressive realisation, retrogression is then the reduction of any level of attainment up to, and including that ceiling. A reduction in any additional benefits in excess of the ceiling of full realisation of the relevant ESCRs does not therefore constitute a retrogressive measure.

Integrating environmental considerations in the doctrine of non-retrogression requires measures to protect the environment and natural resources in order to ensure that environmental harm does not adversely affect ESCRs and lead to retrogression. The former Special Rapporteur on the Issue of Human Rights Obligations relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment notes that States Parties' discretion "to determine appropriate levels of environmental protection" is constrained by the presumption against retrogressive measures under the Covenant.[342] Measures related to environmental protection must not, therefore, diminish the enjoyment of ESCRs. Avoiding retrogressive measures also requires that States Parties pay particular attention to the sustainability of the measures adopted for the progressive realisation of ESCRs. The principles of IEL are a useful guide to illustrate these dimensions of non-retrogression.

The integral relationship between the notion of sustainability and the progressive realisation of ESCRs is discussed above.[343] The corollary of this relationship is the link between retrogression and unsustainability. By definition, if a level of enjoyment of a right

[341] See 6 3 4 above.
[342] UNHRC *Report of the Special Rapporteur on the Issue of Human Rights Obligations relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment: Framework Principles* (24 January 2018) para 32-33.
[343] See 6 3 3 1 above.

cannot be sustained over a period of time, then a reduction in the level of enjoyment is inevitable. Although sustainability is not itself a principle of IEL identified in Chapter 4, its significance in the context of retrogression is underscored in the work of the former Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Catarina de Albuquerque. While the meaning and scope of sustainability in this context is unclear, it is evident that it does include environmental sustainability.[344]

The Special Rapporteur highlights the relationship between sustainability and non-retrogression in the context of the right to water and sanitation:

> "There is a clear link between non-retrogression and sustainability. Acts or omissions that result in retrogressions in the progressive realization of the rights to water and sanitation jeopardize sustainability. […] [R]etrogressive steps will perpetuate unsustainable practices and create a constant threat to the full realization of economic, social and cultural rights in general and the rights to water and sanitation in particular".[345]

Progressive realisation, and by extension non-retrogression, cannot be achieved without sustainable approaches to the realisation of ESCRs that consider the long-term viability of measures used as well as the sustainable use of resources. With regard to the use of resources, it is significant to note that the Special Rapporteur's report emphasises the retrogression that is likely to result from "letting infrastructure deteriorate due to a lack of investment in operation and maintenance".[346] Appropriate management and use of existing infrastructure, systems and resources can assist in promoting long-term sustainability and thereby prevent retrogression in ESCRs in times of crisis.[347] This approach is consistent with a qualitative view of existing State resources that considers their longevity and does not solely depend on the allocation of new resources to realise ESCRs.[348]

Importantly, the Special Rapporteur emphasises the need to ensure non-discrimination. As the report notes, "[l]ack of sustainability, slippages and backward steps will primarily affect the most marginalized members of society, since they will often lack the means to adjust, a necessary voice, visibility, and access to mechanisms of redress".[349] In other words, a failure to prevent discrimination will inevitably result in the disproportionate impact of retrogression on "the most marginalized members of society".[350] In order to ensure that

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[344] See 6 3 3 1 above. See UNHRC *Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Catarina de Albuquerque* (11 July 2013) A/HRC/24/44 para 18-23.
[345] Para 17.
[346] Para 14.
[347] See, for example, UNHRC *Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation* (2013) A/HRC/24/44 para 14, 16, 22, 27, 34 & 37.
[348] See Chapter 5, 5 3 1, 5 3 2 2 & 5 6 1 in relation to a qualitative view of existing available resources.
[349] UNHRC *Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation* (2013) A/HRC/24/44 para 24.
[350] Para 24 & 67.

discrimination and retrogression are avoided, the Special Rapporteur argues that "it is crucial to ensure that the 'forever' dimension – including considerations of how operation and maintenance will be paid for and managed – is built into policymaking from the outset".[351] Ensuring the sustainability of systems and services for the long term will result in increased security and consistency in the realisation of ESCRs for disadvantaged or marginalised groups who would ordinarily be most severely impacted by the retrogression that tends to accompany economic and financial crises.

While the Special Rapporteur's mandate was limited to the right to water and sanitation, the report's perspectives on sustainability and retrogression have relevance for all ESCRs. Just as sustainability can ensure that levels of attainment of ESCRs can be maintained, unsustainable measures and practices pose a significant threat to ESCRs and will often lead to retrogression. In light of the limitations of the natural environment including, for example, the notion of planetary boundaries or the finite nature of non-renewable resources, an approach to ESCRs that does not include environmental sustainability will eventually result in retrogression when the effects of such unsustainable approaches are inevitably felt.

In extreme circumstances unsustainable approaches to ESCRs may be deemed necessary where they are required as a matter of urgency in order to meet core obligations. In the case of extreme drought, for example, unsustainable measures employed by a State Party for the sake of providing basic access to water could be justifiable under the Committee's criteria for retrogressive measures.[352] Such unsustainable interventions would need to be temporary, necessary, proportional and non-discriminatory. Once the core obligations have been met, replacing the unsustainable measures with a long-term sustainable approach must be a priority. It is also important to note that such unsustainable and potentially retrogressive steps should only be contemplated as a last resort, and once the State Party has made every effort to use the maximum of available resources to meet its obligations through appropriately sustainable measures (including through, for example, progressive taxation and seeking international assistance and cooperation).[353]

In addition to the relationship between sustainability and non-retrogression, it is useful to consider how the principles of IEL identified in Chapter 4 can assist in preventing

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[351] UNHRC *Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation* (2013) A/HRC/24/44 para 67. The "'forever' dimension" refers to the Special Rapporteur's description of States' obligations to ensure services "for everyone, forever". See para 65 & 86.

[352] Such unsustainable measures could include the use of water resources beyond the ability of those resources to be naturally replenished.

[353] See Chapter 5 in relation to maximum available resources. In particular, see Chapter 5, 5 4 1.

retrogressive measures resulting from the impacts of climate change and environmental degradation. These are considered below.

As a core component of sustainable development, the principle of integration requires the incorporation of the environment in decision-making.[354] As ESCRs depend on a healthy environment, a failure to integrate environmental considerations within measures to progressively realise ESCRs will result in retrogression. It is imperative that the environment be included in the long-term planning for progressive realisation and that measures related to mitigation and adaptation to climate change are included in this. A failure to adequately consider the effects of climate change on ESCRs and integrate these into measures and policies for progressive realisation will lead to poorly informed policies and a lack of preparedness for crises. This may then lead to retrogressive measures. In its concluding observations with respect to Bangladesh and Mauritius the Committee has, for example, commended the States Parties for establishing funds related to the environment,[355] and has recommended that the States Parties strengthen disaster response and risk reduction in addition to seeking international cooperation and assistance for mitigating and responding to the effects of climate change.[356]

The principle of intergenerational equity highlights the importance of a forward-looking view of ESCRs and progressive realisation. If measures put in place for the current generation take appropriate account of the environment and the need for sustainability, they will be more resilient against possible retrogression and will also ultimately benefit future generations.

As environmental harm may lead to retrogression, it is important to prevent environmental harm as far as possible. Considering the irreversible nature of many environmental impacts, and the potential effect this could have on the level of enjoyment of ESCRs, it is important to apply to the preventive principle in order to avoid retrogressive measures. Similarly, the use of the precautionary principle can safeguard the environment in order to prevent potential future risk to ESCRs which might necessitate retrogressive measures.

Where environmental harm has been caused, incorporating the polluter pays principle into domestic law can ensure that States Parties do not bear related environmental costs and would thereby protect resources allocated to ESCRs from being diverted into

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[354] See Chapter 4, 4 3 1 2 for a discussion of the principle of integration.
[355] See CESCR *Concluding Observations, Mauritius* (5 April 2019) E/C12/MUS/CO/5 para 9; CESCR *Concluding Observations, Bangladesh* (18 April 2018) E/C12/BGD/CO/1 para 13.
[356] CESCR *Mauritius* (2019) para 10. See also CESCR *Bangladesh* (2018) para 14.

emergency environmental rehabilitation. A failure to implement measures to hold polluters accountable for the costs of their pollution results in unexpected and unnecessary costs on States Parties that may ultimately lead to a reduction in ESCR-related budgets and other retrogressive measures.

While the examples above examine how environmental principles can assist in protecting ESCRs from retrogression, there may also be circumstances where these principles can be used to *justify* retrogressive measures. Where current approaches to ESCRs are unsustainable or environmentally harmful, retrogression may be a necessary step in the transition to more environmentally sustainable measures that ensure the continued long-term enjoyment of ESCRs. However, as noted above, this would only be relevant in the most extreme circumstances. Any such retrogressive measures must only be considered as a last resort,[357] and after the relevant State Party has made use of the maximum of available resources.[358] This includes employing progressive taxation and related redistribution of resources to protect the ESCRs of the most marginalised and disadvantaged.[359] This also requires a concerted effort from the State Party to seek international assistance and cooperation to employ more environmentally sustainable measures before resorting to retrogression.[360] Finally, any such measures would need to be justified according to the Committee's criteria for retrogressive measures or, where relevant, the limitations clause in article 4 of the Covenant.

Retrogression might be justified in accordance with the preventive principle where significant, or potentially irreversible, environmental harm poses a threat to ESCRs. Immediate retrogressive measures in relation to ESCRs may therefore need to be put in place in order to protect the ability of the State Party to continue to realise ESCRs in the future. Similarly, the precautionary principle suggests that where an uncertain but severe risk exists, precaution should be exercised in order to prevent future harm. In the case of such uncertain future harm, proportionality would have particular relevance. The severity of

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[357] For an illustration of the variety of measures States Parties should consider before resorting to retrogressive measures, see UNGA *Interim Report of the Special Rapporteur on Extreme Poverty and Human Rights, Olivier De Schutter: The "Just Transition" in the Economic Recovery: Eradicating Poverty within Planetary Boundaries* (7 October 2020) A/75/181/Rev1.

[358] See Chapter 5 for an examination of the obligation to use the maximum of available resources.

[359] See Chapter 5, 5 4 1. See, for example, CESCR *Concluding Observations, Spain* (25 April 2018) E/C12/ESP/CO/6 para 16; CESCR *Concluding Observations, Argentina* (1 November 2018) E/C12/ARG/CO/4 para 22; CESCR *Concluding Observations, Ecuador* (14 November 2019) E/C12/ECU/CO/4 para 21-22. See also Elson, Elson, Balakrishnan & Heintz "Public Finance, Maximum Available Resources & HR" in *HR & Public Finance* 16.

[360] See Chapter 5, 5 3 and 5 4 with regard to international assistance and cooperation. See, for example, CESCR *Mauritius* (2019) para 10; CESCR *Bangladesh* (2018) para 14.

potential harm posed to the environment, taken with the related risk to ESCRs, would need to outweigh the effect of any retrogressive measures required in order to prevent this potential environmental harm.

Any retrogressive measures implemented in order to protect the environment or ensure the sustainability of States Parties' steps towards progressive realisation would need to be appropriately justified. The relevant criteria identified by the Committee include: the context of the full use of maximum available resources and the totality of rights in the Covenant; whether the measures are temporary, necessary, proportional and non-discriminatory; and whether the minimum core is affected.[361] These are discussed in more detail below.

In relation to the context of the full use of maximum available resources and the totality of Covenant rights, where retrogressive measures are taken in order to protect the environment, and where the maximum of available resources have been used,[362] these measures may be justifiable. In order to show that the measures are justified, the environmental protection in question must be linked to the protection of ESCRs. If the relevant measures to protect the environment have the effect of ensuring the continued protection and realisation of ESCRs, both now and in future, then it is proposed that such retrogressive measures could be acceptable if all other criteria are met.

Regarding whether the measures are temporary, any retrogressive measures taken in order to protect the environment or secure the sustainable use of resources must be temporary. This means that the measures should only persist for as long as they are necessary. Where a State Party wishes to impose a permanent restriction on ESCRs this should be dealt with as a limitation under article 4 of the Covenant and the State Party would be required to meet the criteria therein.[363]

Turning to the necessity of retrogressive measures, here the justification of such measures depends on the extent to which the steps taken to protect the environment can be linked to the protection and realisation of ESCRs. Where there is clear evidence that the steps to protect the environment are essential in order to secure the future realisation of ESCRs, then the retrogressive measures should be deemed necessary. EIAs and HRIAs are essential tools in determining the likely impacts of proposed measures (and the impacts of inaction) as well as the resultant effect on ESCRs. The necessity of retrogressive measures is likely to be particularly evident in the case of measures to prevent irreversible

[361] See 6 4 1 above on the Committee's criteria for assessing retrogressive measures.
[362] See Chapter 5 for a detailed analysis of maximum available resources.
[363] ICESCR article 4.

environmental harm that would permanently affect ESCRs. It is also important to point out that a retrogressive measure will not be deemed necessary if the State Party has not yet made full use of the maximum of available resources as required by the Covenant.

Proportionality is perhaps the most pertinent criterion for assessing the retrogressive nature of measures taken to protect the environment.[364] Here the risk to the environment, and its ultimate effect on ESCRs, must be greater than the impact of the retrogressive measures themselves. This is well illustrated in the context of the precautionary principle. Where serious and uncertain potential environmental harm exists, the precautionary principle indicates that it should be avoided and prevented. In order to justify reliance on this principle when implementing a retrogressive measure, a State Party would need to show that the extent of the possible harm to ESCRs (as a result of the environmental damage) is significantly greater than the certain harm the State Party will cause to ESCRs through the retrogressive measure itself. Proportionality is also relevant in the context of the needs of future generations. In some cases, a minor retrogressive step in the enjoyment of ESCRs for the present generation could protect future generations from severe harm to ESCRs, or even harm to the basic subsistence of future people. For example, a State Party may be forced to reduce fishing quotas for a season due to a dramatic decline in the population of a specific species. While this might, for example, impact on access to food and livelihoods in the short term, the step could be justifiable if it protects the species and allows for continued access in the future – protecting access to food and livelihoods for present and future generations. In such instances a proportionality enquiry suggests that retrogression can be justified where a failure to do so would have disproportionate and severe consequences for ESCRs in the future or, indeed, for ESCRs in other States Parties.

In addition to the above, any retrogressive measures must also be non-discriminatory. This criterion should be understood in the context of the obligation to avoid direct and indirect discrimination under article 2(2) of the Covenant.[365] In relation to measures that protect the

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[364] In this regard, see S Liebenberg "Between Sovereignty and Accountability: The Emerging Jurisprudence of the United Nations Committee on Economic, Social and Cultural Rights under the Optional Protocol" (2020) 42 *Human Rights Quarterly* 48 82-84. Liebenberg shows that the Committee's jurisprudence under the Optional Protocol has demonstrated an important role for proportionality analysis. See also 84 where it is noted that "the Committee's scrutiny of the state's justifications resembles the proportionality analysis typically applied to limitations of rights".

[365] In relation to the obligation of non-discrimination, see ICESCR article articles 3, 7(a)(i), 7(c), 10(3) & 13; CESCR *General Comment No 16*; CESCR *General Comment No 20: Non-discrimination in Economic, Social and Cultural Rights (Art 2, Para 2, of the International Covenant on Economic, Social and Cultural Rights)* (2 July 2009) E/C12/GC/20. See also "The Limburg Principles" (1987) *HR Quarterly* para 35-41; "The Maastricht Guidelines" (1998) *HR Quarterly* para 12 & 14(b); Sepúlveda *Nature of Obligations under the ICESCR* 380-404; M Langford & JA King "Committee on Economic, Social and Cultural Rights" in M Langford (ed) *Social Rights Jurisprudence: Emerging Trends in International and Comparative Law* (2008) 477 489-492.

environment, it is particularly important for States Parties to ensure that retrogressive measures do not discriminate against indigenous peoples and other individuals and groups who are dependent on the environment and natural resources for basic subsistence.[366]

In relation to indirect discrimination, the effect of retrogressive measures must not have a disproportionate negative impact on the ESCRs of certain groups or individuals. Using the example above, a retrogressive reduction in fishing quotas may be a necessary and proportionate measure in order to maintain the viability of the species in future, and thereby to protect related livelihoods and access to food. However, any measures in this regard must also not have a disproportionate impact on the ESCRs of individuals or groups who are marginalised or disadvantaged. In this example the State Party would need to ensure that the reduced quotas are imposed and distributed so as to have the least impact on small-scale fishers or indigenous communities who depend more heavily on the natural resource. Those whose ESCRs would not be significantly harmed, such as larger fishing corporations, should therefore bear the brunt of such retrogressive measures.[367]

Finally, an assessment of retrogressive measures must consider whether the minimum core is affected. Given the priority status afforded to the minimum core by the Committee, it is unlikely that retrogressive measures can be justified where they violate the minimum core of ESCRs. Circumstances may exist where measures to ensure sustainability or to protect the environment are vital for safeguarding the State Party's ability to meet its core obligations. In such instances, the State Party should prioritise those measures which allow it to meet its core obligations with the utmost urgency. Once the minimum core has been met in the immediate or short-term, the State Party should then implement measures for environmental protection as a priority. Once again, this would only be relevant in the most extreme circumstances where the State Party is unable to take the necessary measures to protect the environment despite making full use of the maximum of available resources and appropriately seeking international assistance and cooperation.

In conclusion, non-retrogression has significant links to sustainability, and retrogressive measures can be prevented through appropriate measures to protect the environment as well as through a future-oriented view of progressive realisation. In light of the various

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[366] See, for example UNHRC *Report of the Independent Expert on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment, John H Knox: Mapping Report* (30 December 2013) A/HRC/25/53 para 25 & 76-78.

[367] See, for example, the plight of small-scale fishers in the Philippines as addressed by the Committee in its concluding observations. See CESCR *Concluding Observations, Philippines* (26 October 2016) E/C12/PHL/CO/5-6 para 14-15. However, these concluding observations did not consider retrogressive measures.

environmental challenges that States Parties contend with, and will face in the future, it is vital to ensure that States Parties employ sustainable approaches to ESCRs that prevent future environmental impacts. In doing so, States Parties will build resilience against environmental harm to ESCRs and thereby avoid retrogression. Any retrogressive measures should only be considered as a last resort, and would need to be justified according to the Committee's criteria. Ultimately, forward-looking measures towards progressive realisation which are sustainable and take the environment into account will be far more resilient over the long term and will support States Parties in fulfilling their duty to avoid retrogressive measures.

6 5 Conclusion

This chapter has examined three related aspects of article 2(1) and how they should be interpreted to incorporate environmental considerations. The first is the notion of core obligations; the second is progressive realisation, with an emphasis on forward-looking and long-term measures; and the third is the duty to avoid retrogression.

This chapter argues for an interpretation of core obligations and progressive realisation that considers the limits of the environment as well as our inherent dependence on the environment for the realisation of ESCRs. The "full realization" of Covenant rights must be understood as a threshold that incorporates all relevant environmental constraints, including planetary boundaries, limited natural resources, and irreversible environmental harm. The ceiling of "full realization"[368] should therefore be consistent with an "ecological ceiling".[369] Similarly, core obligations are the floor or baseline of ESCRs from which progressive realisation proceeds. Greening the interpretation of core obligations requires the identification and protection of the minimum environmental conditions necessary to realise the core of ESCRs. As the environmental dimension of core obligations, States Parties must protect this environmental baseline with the urgency and priority demanded of core obligations. This conceptualisation of the floor and ceiling of ESCRs, and the environmental dimension thereof, is akin to the theory of doughnut economics developed by Kate Raworth. In the case of this interpretation of the Covenant, the "safe and just space for humanity" between the baseline and ceiling is the sustainable realisation of ESCRs for all, within appropriate environmental limits.[370]

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[368] ICESCR article 2(1).
[369] Raworth *Doughnut Economics* 44-45.
[370] On the safe operating space for humanity, see Raworth *Doughnut Economics* 44-45 which builds on earlier work on planetary boundaries such as Rockström et al (2009) *Nature*.

With respect to core obligations, this chapter has therefore highlighted that guaranteeing the minimum core of ESCRs requires the protection of the environment. Any environmental threats to the core of ESCRs must be appropriately prioritised and prevented, with the requisite urgency. When it comes to uncertain risks to the core, the standard of precaution required of States Parties is particularly high. Wherever environmental degradation threatens the ability of a State Party to meet their core obligations, it is particularly important for other States Parties to provide international assistance and cooperation to protect the environment and ESCRs as necessary.

Progressive realisation requires States Parties to take a range of measures in the immediate, short-term and long-term towards to full realisation of ESCRs. Due to the long-term nature of much environmental harm, this chapter focuses on long-term measures, as well as the forward-looking dimension of progressive realisation that is required for future planning and the sustainability of ESCRs. The Committee's references to sustainability confirm that this long-term perspective is an important part of progressive realisation, although the notion of sustainability requires further delineation. The report of the former Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Catarina de Albuquerque provides valuable guidance on how sustainability might be conceptualised in the context of ESCRs.[371] Effective progressive realisation of ESCRs requires planning for the future and putting long-term measures into place. States Parties must also consider long-term impacts and prevent irreversible harm to the environment. Any measures taken towards the realisation of ESCRs must be sustainable over the long term and take future environmental impacts into account.

Progressive realisation that is appropriately sustainable and takes the environment into account will benefit both present and future generations. This chapter has investigated the possibilities for the position of future generations under the Covenant. The Committee has recognised the relevance of future generations on a number of occasions, although the full ESCRs of future generations have not been recognised. This dissertation argues that recognition of the full range of ESCRs of future generations on the same plane as those of the current generation would require a strained and inappropriate interpretation of the Covenant. However, despite this absence of explicit recognition of ESCRs for future generations, States Parties do have certain obligations towards future generations. These include an obligation to consider future generations in measures taken towards progressive

[371] UNHRC *Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation* (2013) A/HRC/24/44 para 18-23.

realisation; to prevent inequitable environmental harm; and to adopt measures that protect the environment and future generations wherever possible. Where the protection of future generations might result in some detrimental impacts for the current generations, the Committee should develop guiding principles or factors to assist States Parties in selecting the appropriate measures. The factors considered should include: the extent to which basic subsistence is threatened; the proportionality of benefits to one generation at the expense of another; and the extent to which irreversible impacts are threatened.

Progressive realisation that is effective in the face of climate change and environmental degradation therefore requires a future-oriented approach that actively incorporates environmental considerations and future generations. Ensuring sustainable approaches to progressive realisation that consider the environment and future generations can prevent unnecessary retrogression or violations of ESCRs in the future, while also safeguarding the ability of States Parties to continue to improve the enjoyment of ESCRs.

Finally, this chapter has examined the obligation to avoid retrogressive measures. Non-retrogression ensures that levels of attainment related to ESCRs are maintained, and this maintenance of levels of enjoyment is fundamentally linked to environmental sustainability. The appropriate protection of the environment on which ESCRs depend can assist in ensuring that States Parties do not have to resort to retrogressive measures. This therefore requires States Parties to focus their efforts on preventing retrogression by promoting sustainability and environmental protection including through the appropriate use of the preventive and precautionary principles. In doing so, States Parties can avoid and prevent threats to ESCRs resulting from environmental degradation and climate change, thereby complying with the obligation to avoid retrogression.

In rare circumstances States Parties might be in a position to justify retrogressive measures that are implemented in order to protect the environment or safeguard the sustainable use of resources. However, such retrogressive measures can only be contemplated as a last resort and after the State Party has made full use of the maximum of available resources to meet its Covenant obligations. In addition to this, the retrogression must be justified according to the criteria established by the Committee. In light of this, it is likely that in the overwhelming majority of cases such retrogressive measures would not be permissible.

The following chapter synthesises the research findings of earlier chapters, highlighting this dissertation's proposals for greening States Parties' obligations under article 2(1), in

accordance with the rules applicable to interpreting human rights treaties and guided by the principles of IEL.

CHAPTER 7:
GREENING THE OBLIGATIONS OF STATES PARTIES UNDER ARTICLE 2(1)

7 1 Introduction

This dissertation has explored how principles of international environmental law ("IEL") should inform the interpretation of States Parties' obligations under article 2(1) of the Covenant in order for a systematic integration of environmental considerations in the interpretation of the Covenant. As demonstrated in Chapter 2, ESCRs are dependent on a healthy environment and are severely threatened by environmental degradation and climate change. This chapter summarises the findings of earlier chapters and proposes an interpretation of article 2(1) that incorporates environment-related obligations in order to effectively integrate relevant environmental considerations affecting Covenant rights.

The chapter begins with a synthesis of the rules applicable to the interpretation of human rights treaties, and the Covenant in particular, as analysed in Chapter 3. It reviews the rules of interpretation and demonstrates that these rules require the integration of the environment in the interpretation of article 2(1) of the Covenant.

Thereafter this chapter proceeds to recall the selected principles of IEL outlined in Chapter 4, reviewing their relevance to the interpretation of article 2(1) as elaborated in Chapters 5 and 6. The latter chapters emphasise certain essential elements of article 2(1), namely: the obligation to use the maximum of available resources; core obligations; the obligation of progressive realisation; and the prohibition of retrogression. Guided by the principles of IEL, the environmental dimensions of these elements of the Covenant are highlighted.

The chapter then provides a synthesis of the environment-related obligations that are required in order to "green" the interpretation of States Parties' obligations under article 2(1), as identified and examined in Chapters 5 and 6. The obligations are arranged according to the categories of maximum available resources, progressive realisation and non-retrogression, core obligations, and international assistance and cooperation. The environment-related obligations identified represent a baseline of obligations that are essential to a systematic integration of environmental considerations in the interpretation of the Covenant.

The chapter concludes with a consideration of relevant factors and principles to guide States Parties in choosing the most appropriate measures to realise ESCRs. These are particularly important for decision-making in circumstances where developing and least developed states must balance development needed for the realisation of ESCRs with the need to prevent environmental harm in order to protect ESCRs.

7 2 Interpretive support for greening States Parties' obligations

The principles of interpretation applicable to treaties, and to human rights treaties in particular, are examined in Chapter 3. This dissertation argues that the interpretation of the Covenant must include the consideration of the environment and environmental dimensions of ESCRs in order to be effective and appropriately responsive to evolving environmental conditions. This section synthesises the relevant principles of interpretation, and demonstrates how they support, and indeed require, greening the Covenant.

It is helpful to begin by reiterating that legal interpretation and the generation of meaning from a text is a living process without fixed outcomes.[1] However, despite the open-ended nature of the interpretive process, the interpretation of treaties in international law must follow the rules in the Vienna Convention on the Law of Treaties ("VCLT").[2] Human rights tribunals have shown a strong preference for teleological interpretation, placing emphasis on the object and purpose of a treaty.[3] The interpretation of human rights treaties also involves additional principles and approaches that can be understood as falling under the umbrella of teleological interpretation. These include the *pro homine* approach, the principle of effectiveness, and the evolutive approach to interpretation.[4]

In the context of the Covenant, the Committee has shown support for a teleological approach to interpretation.[5] It has recognised that the Covenant should have practical effect and benefit individuals in accordance with the principle of effectiveness and the *pro homine* approach.[6] The Committee has also emphasised that the interpretation of a right should not

[1] P Allott "Interpretation: An Exact Art" in A Bianchi, D Peat & M Windsor *Interpretation in International Law* (2015) 373 382-383. See Chapter 3, 3 2 1 on the nature of legal interpretation.
[2] Vienna Convention on the Law of Treaties (adopted 23 May 1969, entered into force 27 January 1980) 1155 UNTS 331 article 31-32.
[3] See Chapter 3, 3 3 3 in relation to the interpretation of human rights treaties.
[4] See Chapter 3, 3 3 3 on the *pro homine* approach. See Chapter 3, 3 3 3 2 1 on the principle of effectiveness and 3 3 2 2 on the evolutive approach.
[5] See Chapter 3, 3 3 4 3 on the Committee's approach to the interpretation of the Covenant.
[6] See for example CESCR *General Comment No 12* para 6; CESCR *General Comment No 9: The Domestic Application of the Covenant* (3 December 1998) E/C12/1998/24 para 11; CESCR *General Comment No 17* para 20. See also Sepúlveda *Nature of Obligations under the ICESCR* 85.

render other rights meaningless or ineffective.[7] In accordance with the evolutive approach, the Committee has recognised that interpretation of the Covenant must give effect to present-day conditions and evolve to reflect societal changes.[8]

In light of the abovementioned principles of interpretation, this dissertation argues that an interpretation of the Covenant that excludes or overlooks environmental considerations will be ineffective in promoting ESCRs and in appropriately adapting to rapidly changing environmental conditions. A failure to include environmental considerations within the scope of the Covenant would have a disproportionately negative impact on the disadvantaged and marginalised individuals and groups already bearing the brunt of environmental degradation, particularly indigenous communities.[9] As demonstrated in Chapter 2, the realisation of ESCRs is intimately intertwined with the condition of the environment.[10] Climate change and environmental degradation pose significant risks for the enjoyment of ESCRs and the ability of States Parties to fulfil their Covenant obligations.[11] ESCRs cannot, therefore, be effectively realised without considering the impacts of environmental degradation and climate change.

Developments in IEL since the conclusion of the Covenant are relevant for present-day interpretation of the Covenant. It is therefore appropriate to consider the relevance and significance of principles of IEL for the interpretation of the Covenant.[12] These principles cannot simply be transferred from environmental law and imposed on States Parties in the human rights context, as the application of other bodies of international law is not within the scope of the Committee's mandate. However, they are a valuable guide as they reflect not only fundamental changes in the state of the environment itself since the adoption of the Covenant, but also offer insight into significant changes in international law pertaining to the environment. As a result, these principles serve to demonstrate ways in which the interpretation of the Covenant can evolve to integrate relevant environmental

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[7] CESCR *General Comment No 3* para 9; CESCR *General Comment No 13* para 44; CESCR *General Comment No 14* para 31; CESCR *General Comment No 17* para 10; CESCR *General Comment No 18* para 20. CESCR *General Comment No 21: The right of everyone to take part in cultural life (Art 15, para 1(a) of the Covenant)* (21 December 2009) E/C12/GC/21 para 20. See also Sepúlveda *Nature of Obligations under the ICESCR* 85.

[8] See Chapter 3, 3 4 3. See also CESCR *General Comment No 4* para 6; CESCR *General Comment No 12* para 1; CESCR *General Comment No 14* para 10; CESCR *General Comment No 17* para 7; CESCR *General Comment No 18* para 15; CESCR *General Comment No 21* para 9; CESCR *General Comment No 22* para 1; CESCR *General Comment No 23* para 4; Sepúlveda *Nature of Obligations under the ICESCR* 83 & 86.

[9] See CESCR *The Pledge to Leave No One Behind: The International Covenant on Economic, Social and Cultural Rights and the 2030 Agenda for Sustainable Development* (5 April 2019) E/C12/2019/1 para 6-9.

[10] See Chapter 2, 2 3 1 on the relationship between the environment and ESCRs.

[11] See Chapter 2, 2 2 1 and 2 3 1 on environmental threats to ESCRs.

[12] The principles of IEL are examined in detail in Chapter 4.

considerations. Any interpretation drawn from a reliance on these principles gains its legitimacy not from the principles themselves (although in some instances their status in international law can be persuasive), but from an appropriately evolutive interpretation of the Covenant consistent with the interpretive rules in the VCLT.

The rules of treaty interpretation therefore not only permit, but positively require, an evolutive interpretation of the Covenant that integrates environmental considerations in order to safeguard ESCRs in the face of the threats posed by environmental degradation and climate change. This dissertation has focused on the interpretation of States Parties' general obligations under article 2(1), thereby allowing for environmental considerations to be incorporated into obligations that are applicable to all Covenant rights. The section below considers the environmental dimensions of the obligations in article 2(1) with reference to the relevant principles of environmental law identified in Chapter 4 and applied in Chapters 5 and 6.

7 3 Greening States Parties' obligations with the guidance of principles of IEL

7 3 1 Introduction

As argued in the previous sections, the principles of IEL are an important guide in greening the interpretation of the obligations in article 2(1) of the Covenant. The principles serve to illustrate current conditions both in terms of international law developments and in terms of contemporary environmental challenges. They are therefore an important gauge for an evolutive interpretation of the Covenant that responds to present-day conditions. The relevance of each of these principles in integrating environmental considerations in the interpretation of States Parties' obligations under article 2(1) is synthesised below.

7 3 2 Sustainable development

Sustainable development is a broad concept without an agreed definition in international law. However, there are certain elements or principles of sustainable development that are widely recognised.[13] The primary or core element of sustainable development is the principle of integration which requires the inclusion of environment in decision-making. The other elements of sustainable development include the principles of sustainable use, intergenerational equity, and intragenerational equity. Below is an examination of how the

[13] See Chapter 4, 4 3 1 for an analysis of sustainable development and its elements.

elements of sustainable development can guide a green interpretation of States Parties' obligations in article 2(1).

7 3 2 1 Principle of integration

As noted above, the principle of integration requires the incorporation of environmental factors in decision-making.[14] In the context of article 2(1) of the Covenant, this requires the integration of environmental considerations within any measures taken to realise ESCRs. An effective interpretation of the Covenant therefore must take account of the relationship between ESCRs and the environment.[15] Applying the principle of integration ensures that due consideration is given to the environment and its impact on the enjoyment of ESCRs.

In relation to the obligation to use the "maximum of available resources",[16] the principle of integration indicates that resources should be understood to include natural resources. This involves not only those natural resources that can be exploited for financial revenue and have been commodified, but also those natural resources that directly contribute to the realisation of ESCRs, such as fertile soil, clean air and water, and a stable climate. The inherent value of such resources in supporting the enjoyment of ESCRs by providing a healthy environment must be protected and maximised for the effective realisation of ESCRs. [17] This requires appropriate environmental protection, sustainable use and prevention of harm to these critical environmental resources. Understanding maximum available resources from the perspective of the environment also means that any international resources provided in accordance with the obligation of international assistance and cooperation must not result in environmental harm, and such resources should include resources for environmental protection as well as climate change mitigation and adaptation.[18]

The use and exploitation of natural resources for the realisation of ESCRs should be carefully considered given the potentially harmful impacts that may follow certain forms of natural resource exploitation.[19] EIAs and HRIAs must be conducted prior to the potentially

[14] See Chapter 4, 4 3 1 2 in relation to the principle of integration.
[15] See 7 2 above.
[16] ICESCR article 2(1).
[17] See Chapter 5, 5 3 2 2 on the Committee's treatment of natural resources. See Chapter 5, 5 3 1 on the qualitative approach to resources. See also S Skogly "The Requirement of Using the Maximum of Available Resources for Human Rights Realisation: A Question of Quality as Well as Quantity" (2012) 12 *Human Rights Law Review* 393-420.
[18] See Chapter 5, 5 3 3.
[19] See Chapter 5, 5 4 2 on natural resource exploitation.

harmful exploitation of natural resources.[20] Temporary financial gain from exploitative and harmful activities must be weighed against the inherent value of that natural environment in supporting the realisation of ESCRs. The availability of natural resources must therefore be understood in light of the likely impacts resulting from the exploitation of the resource in question.[21] Natural resources must be deemed unavailable for the purposes of realising ESCRs if their exploitation or extraction will cause significant harm to the environment and to ESCRs.

Integrating environmental considerations into States Parties' obligations also requires measures to protect and preserve a healthy environment which is crucial for the sustainable realisation of ESCRs. These protective measures require resources to be devoted to the regulation, management and protection of the environment. This includes resources for the enforcement of environmental law, the protection of environmental defenders, and the prevention of corruption and mismanagement in respect of environmental governance.[22] In order not to strain the interpretation of the Covenant beyond what is appropriate, any such management and protection of the environment in terms of the Covenant must be clearly linked to the realisation of the ESCRs.

Resource use for the realisation of ESCRs cannot be effective without including the environment as a significant resource and a determining factor in the enjoyment of Covenant rights. A failure to appropriately consider the environment would have a disproportionately negative impact on those individuals and groups that rely directly on natural resources for subsistence, particularly indigenous peoples.[23] In addition, the effective use of resources for the realisation of ESCRs requires that environmental degradation and its impacts are considered. Appropriate impact assessments must be required in order to ensure that States Parties' resource use in the pursuit of ESCRs is effective over the long term and does not cause undue harm to the environment, and ultimately to the ESCRs they seek to promote.[24]

Effective progressive realisation of ESCRs also demands appropriate environmental protection and assessment of potential impacts, particularly in light of the long-term and

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[20] For an examination of environmental and human rights impact assessments in the context of natural resource exploitation, see Chapter 5, 5 4 2 4.
[21] See Chapter 5, 5 4 2 1 on the human rights impacts of natural resource exploitation.
[22] See Chapter 5, 5 3 3 in relation to the use of non-natural resources for environmental protection. See also Chapter 5, 5 6 3 in relation to effective use.
[23] See Chapter 5, 5 6 2 on the equitable use of resources. See also Chapter 5, 5 2 2 right to self-determination and indigenous peoples.
[24] See Chapter 5, 5 6 3 in relation to effective use, and see Chapter 5, 5 4 2 4 in relation to environmental and human rights impact assessments. States Parties must require private actors to undertake impact assessments, and States Parties must undertake such assessments where they are the proponent of a potentially harmful activity.

sometimes irreversible nature of many environmental impacts.[25] Long-term or permanent damage to the environment on which ESCRs depend will result in significant impacts on the enjoyment of ESCRs. The integration of environmental considerations requires that measures to realise ESCRs are sustainable. In other words, the measures taken to realise ESCRs must not damage the environment or deplete natural resources to the extent that they compromise the future ability of States Parties to continue to realise ESCRs. Progressive realisation must therefore be pursued in an environmentally sustainable manner.[26] A failure to ensure environmental sustainability and to consider the impact of environmental conditions on long-term progressive realisation will likely lead to severe retrogressive measures in future. The duty to avoid retrogression therefore includes an obligation to pursue sustainable measures to realise ESCRs that incorporate environmental protection and are resilient to climate change and environmental degradation.[27]

An integrated understanding of progressive realisation requires placing appropriate limits on the meaning of "full realization" in article 2(1). The interpretation of what constitutes the full realisation of ESCRs must be defined according to levels of enjoyment that are feasible for all States Parties and their respective populations in light of planetary boundaries and the limits of natural resources.[28]

The principle of integration also requires priority consideration to preserving the environmental conditions necessary to secure the minimum core of ESCRs. Fundamental environmental functions and ecosystems that are crucial for meeting core obligations must be identified and suitably protected. These aspects of the environment must be protected with the appropriate urgency and priority associated with core obligations.[29]

In conclusion, the Committee has not expressly referred to the principle of integration, although it has referred to sustainability and sustainable development on a number of occasions.[30] The Committee has also recognised the impact of the environment on

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[25] See Chapter 6, 6 3 3 in relation to a long-term and forward-looking view of progressive realisation and the environment.
[26] See Chapter 6, 6 3 3 and 6 3 4.
[27] See Chapter 6, 6 4 2 and 6 4 3 in relation to non-retrogression and environmental sustainability. See also See UNHRC *Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Catarina de Albuquerque* (11 July 2013) A/HRC/24/44.
[28] In relation to planetary boundaries, see J Rockström, W Steffen, K Noone, Å Persson, FS Chapin III, EF Lambin, TM Lenton, M Scheffer, C Folke, HJ Schnellnhuber, B Nykvist, CA De Wit, T Hughes, S Van der Leeuw, H Rodhe, S Sorlin, PK Snyder, R Costanza, U Svedin, M Falkenmark, L Karlberg, RW Corell, VJ Fabry, J Hansen, B Walker, D Liverman, K Richardson, P Crutzen, JA Foley, "A Safe Operating Space for Humanity" (2009) 461 *Nature* 472.
[28] See Rockström et al (2009) *Nature* 472.
[29] See Chapter 6, 6 2 on core obligations.
[30] See, for example, CESCR *General Comment No 4* para 8; CESCR *General Comment No 12* para 7; CESCR *General Comment No 15: The Right to Water (Arts. 11 and 12 of the Covenant)* (20 January

ESCRs[31] and has shown its support for imposing environment-related obligations on States Parties. [32] A comprehensive integration of environmental considerations within the Committee's supervisory mandate will enable more systematic attention to the relationship between the environment and the Covenant and will assist in protecting ESCRs from preventable environmental degradation and climate change. The integration of the environment within the scope of States Parties' obligations is an essential component of an evolutive interpretation of the Covenant under present-day conditions that are characterised by multiple environmental crises.

7 3 2 2 Sustainable use

The principle of sustainable use of natural resources aims to protect natural resources from overexploitation and depletion.[33] Sustainable use requires the use of natural resources at a rate that does not lead to their decline or depletion but rather supports their continued use over the long term. Appropriate use of natural resources in the pursuit of ESCRs requires their sustainable use in order to secure sustained realisation of ESCRs and prevent retrogression.

In identifying the resources available for the realisation of ESCRs, States Parties should exclude those natural resources whose use or exploitation cannot be achieved in accordance with the principle of sustainable use. In other words, if continued use of a natural resource would threaten the existence of that resource or lead to its depletion, it should not form part of the "maximum available resources" to be used by the State Party in the realisation of ESCRs. Similarly, natural resources should be deemed unavailable where their use or exploitation would lead to significant environmental harm.[34]

States Parties are required to ensure the equitable use of resources in taking steps towards the realisation of ESCRs.[35] Any incorporation of the principle of sustainable use must therefore be implemented in accordance with this obligation. Where the use of natural resources is limited in accordance with the principle of sustainable use, these limits must be

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2003) E/C12/2002/11 para 28; CESCR *Statement in the Context of the Rio+20 Conference on "The Green Economy in the Context of Sustainable Development and Poverty Eradication"* (4 June 2012) E/C12/2012/1; CESCR *The Pledge to Leave No One Behind: The International Covenant on Economic, Social and Cultural Rights and the 2030 Agenda for Sustainable Development* (5 April 2019) E/C12/2019/1. See also Chapter 6, 6 3 2 & 6 3 3 1 in relation to sustainability and the Covenant.

[31] See Chapter 2, 2 3.

[32] See Chapter 2, 2 3 2, 2 3 3 & 2 3 4 for an analysis of obligations related to the environment in the Committee's concluding observations, general comments and statements.

[33] The principle of sustainable use is examined at Chapter 4, 4 3 1 3.

[34] See Chapter 5, 5 3 3 & 5 5 2.

[35] See Chapter 5, 5 6 3 in relation to the requirement of equitable use of resources.

equitably imposed with particular consideration for those who are most marginalised and disadvantaged. In other words, the burden of any measures to secure sustainable use must be placed on those groups or individuals whose ESCRs will be least affected such as the wealthy and privileged sectors of society.[36]

In the context of the duty of progressive realisation, the principle of sustainable use of natural resources is essential for maintaining (and, where possible, improving) the enjoyment of ESCRs over the long term.[37] This requires considering not only what natural resources are currently available for ESCRs, but also whether those resources will be available in future. Similarly, the unsustainable use of natural resources may force States Parties to consider retrogressive measures.[38] However, as noted above, retrogressive measures would only be permitted in extreme circumstances and where the measures meet the criteria set by the Committee.[39]

In conclusion, ensuring the effectiveness of the Covenant and the obligations imposed in article 2(1) requires the sustainable use of natural resources. Unfettered or unsustainable use of natural resources is a fundamental threat to the enjoyment of Covenant rights both now and in the future. States Parties' obligations in article 2(1) must therefore be understood to include an obligation of sustainable use in relation to the natural resources on which ESCRs depend.

7 3 2 3 Intergenerational equity

Intergenerational equity entails ensuring that the conduct of the present generation does not place an undue burden on future generations.[40] Given the long-term consequences of environmental degradation and climate change, it has become increasingly urgent to focus on the impact of these realities on the ability of future generations to access ESCRs and meet their basic needs. Although the Covenant does not explicitly confer rights on future generations, a teleological interpretation of the Covenant supports an interpretation of

[36] See Chapter 5, 5 6 2. Where, for example, fishing quotas are reduced to protect species from over-exploitation, any such reductions must not have a disproportionately negative impact on the livelihoods or subsistence of small-scale fishers or indigenous communities. In cases such as this, larger and wealthier corporations should bear the brunt of such measures.
[37] See Chapter 6, 6 3 4.
[38] See Chapter 6, 6 4 3.
[39] See CESCR *General Comment No 19* para 42; CESCR *Public Debt, Austerity Measures and the ICESCR* para 4; CESCR *An Evaluation of the Obligation to Take Steps to the "Maximum of Available Resources"* para 10; *Djazia and Bellili v Spain* Communication No 5/2015, E/C12/61/D/5/2015 (2017) CESCR para 17.6. See Chapter 6, 6 4 2 on the Committee's criteria to justify retrogressive measures.
[40] The principle of intergenerational equity is discussed at Chapter 4, 4 3 1 4.

ESCRs that includes long-term planning and a future-oriented view of progressive realisation.[41]

Using the maximum of available resources for the realisation of ESCRs does not imply that all resources must be used in the short-term to fulfil the ESCRs of the current generation.[42] Realising Covenant rights also requires long-term planning for the progressive realisation of ESCRs in the future.[43] If this long-term planning is done effectively, it should include the protection of future generations from environmental harm that would undermine the fulfilment of their rights.[44] Constraints on the use of natural resources as well as the dedication of resources to environmental protection are necessary to ensure progressive realisation and to prevent retrogression in the future.[45] Climate change mitigation and adaptation are particularly important in this regard due to the severe long-term impacts of climate change for present and future generations.

In many cases, ensuring the long-term progressive realisation of ESCRs will benefit future generations, whether they are expressly included or not. Measures taken to protect the environment, mitigate climate change, or ensure that natural resources are not depleted will automatically benefit future generations and support their ability to meet ESCRs. As argued previously, given the nature of overlapping present and future generations, it would be illogical to suggest that progressive realisation does not include consideration of the rights of future generations.[46] Both progressive realisation and intergenerational equity require an understanding of the long-term risks and consequences of measures taken in the pursuit of Covenant rights.[47] An approach that considers long-term effects and the role of the environment would also be more resilient against retrogression for both present and future generations.[48]

While intergenerational equity under the Covenant cannot be interpreted as elevating the needs of non-existent persons over the rights of the current generation, it does require considering the position of future generations and the impact of current States Parties' actions on future generations' ESCRs.[49] Measures that benefit both present and future

[41] See Chapter 6, 6 3 3 2 on the position of future generations.
[42] See Chapter 5, 5 5 2.
[43] See Chapter 6, 6 3 3 where a forward-looking perspective of progressive realisation is considered.
[44] See Chapter 6, 6 3 3 2 where it is argued that States Parties have an obligation to take future generations into account when choosing measures to progressively realise ESCRs.
[45] See, for example, Chapter 5, 5 4 3, 5 5 2 and 5 6 3 with regard to constraints on the use of natural resources.
[46] Chapter 6, 6 3 3 2 2 where the possibilities for recognising future generations' rights are investigated.
[47] See Chapter 6, 6 3 2 and 6 3 3 with regard to the long-term dimension of progressive realisation.
[48] Chapter 6, 6 4 3 examines retrogression and environmental considerations.
[49] See Chapter 6, 6 3 3 2.

generations equitably must therefore be preferred over those that do not. Among other things, this may require determining appropriately sustainable levels of attainment associated with the full realisation of ESCRs in order to ensure that future generations are not disproportionately or inequitably burdened with environmental damage due to the overconsumption or greed of the current generation.[50]

On a number of occasions, the Committee has indicated its support for intergenerational equity and the protection of the ESCRs of future generations.[51] The Committee has recognised the importance of ensuring access to food and water for future generations.[52] In relation to climate change, the Committee has been critical of the negative impact on climate change and the ESCRs of future generations caused by extractive activities and fracking.[53] Perhaps most notably, General Comment 25 refers to "unacceptable harm to the public or the environment", explaining that this would include harm that is inequitable to present or future generations.[54] What is evident from the provisions of the Covenant and the subsequent work of the Committee is that the position of future generations is a relevant consideration which must be taken into account when deciding on appropriate measures for the realisation of ESCRs.

7 3 2 4 Intragenerational equity

The final element of sustainable development to be considered is the principle of intragenerational equity. Intragenerational equity requires ensuring that the burdens of environmental degradation and climate change are not disproportionately placed on certain individuals or groups and that natural resources are used equitably.[55]

Guaranteeing intragenerational equity under article 2(1) of the Covenant requires States Parties to ensure that the use of the "maximum of available resources" in the pursuit of

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[50] See Chapter 6, 6 3 4 where it is argued that an evolutive interpretation of the full realisation of Covenant rights must incorporate environmental limits and planetary boundaries. See also Rockström et al (2009) *Nature* 472; K Raworth *Doughnut Economics: Seven Ways to Think Like a 21st Century Economist* (2017).

[51] See CESCR *General Comment No 12: The Right to Adequate Food (Art 11 of the Covenant)* (12 May 1999) E/C12/1999/5 para 7; CESCR *General Comment No 15: The Right to Water (Arts 11 and 12 of the Covenant)* (20 January 2003) E/C12/2002/11 para 11 & 28; CESCR *General Comment No 25 on Science and Economic, Social and Cultural Rights* (Art 15(1)(b), 15(2), 15(3) and 15(4)) (7 April 2020) E/C12/GC/25 para 56; CESCR *Statement in the context of the Rio+20 Conference on "the green economy in the context of sustainable development and poverty eradication"* (4 June 2012) E/C12/2012/1 para 6(d); CESCR *The Pledge to Leave No One Behind: The ICESCR and the 2030 Agenda* para 12(e); CESCR *Concluding Observations, Argentina* (1 November 2018) E/C12/ARG/CO/4 para 13-15; CESCR *Concluding Observations, Ecuador* (14 November 2019) E/C12/ECU/CO/4 para 11-12.

[52] CESCR *General Comment No 12* para 7; CESCR *General Comment No 15* para 11.

[53] CESCR *Concluding Observations, Argentina* (1 November 2018) E/C12/ARG/CO/4 para 13-15; CESCR *Concluding Observations, Ecuador* (14 November 2019) E/C12/ECU/CO/4 para 11-12.

[54] CESCR *General Comment No 25* para 56.

[55] Intragenerational equity is examined at Chapter 4, 4 3 1 5.

ESCRs does not disproportionately benefit or harm certain people. Where certain groups or geographical areas are burdened with increased pollution, environmental degradation, or climate change impacts, States Parties should allocate resources according to these needs.[56] Those bearing the brunt of polluting industries should receive appropriate benefits and compensation for harm. In addition to this, resources aimed at environmental protection or pollution prevention should be targeted according to the measures that would provide relief for those whose ESCRs are most threatened by environmental harm.

Where international resources are concerned, international assistance and cooperation should be guided by intragenerational equity.[57] In other words, developed states should provide international resources to developing states, particularly where the developing states in question bear an inequitable burden of pollution and environmental harm. [58] This also forms part of the principle of CBDR examined below.[59] Where natural resources are shared among multiple peoples or States Parties, the availability of these resources must be interpreted in accordance with the equitable use of these shared natural resources. States Parties cannot, therefore, use or consume shared resources without considering the human rights of other peoples and States Parties who depend on those resources.[60]

As noted above, it is important that measures for progressive realisation are environmentally sustainable and do not result in undue environmental harm. Given the global nature of climate change and other environmental crises, the realisation of ESCRs over the long term cannot be effective if unsustainable and harmful practices continue. In light of this, it is important for States Parties to ensure that steps taken towards the realisation of ESCRs are sustainable for all States Parties. In other words, every State Party is obligated to provide international assistance and cooperation, in accordance with article 2(1) and in pursuit of intragenerational equity, to ensure that all States Parties are able to implement the necessary measures to protect the environment and mitigate climate change in their progressive realisation of ESCRs.[61]

The international assistance and cooperation referred to above is particularly important given the global and transboundary nature of environmental harm as well as its

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[56] See Chapter 5, 5 3 4 and 5 6 2.
[57] See Chapter 5, 5 3 4. See also Chapter 5, 5 3 1 with regard to international resources.
[58] Chapter 5, 5 3 4 and 5 6 2. See also the Committee's reference to inequitable harm in CESCR *General Comment No 25* para 56.
[59] See 7 3 7 below on the principle of CBDR.
[60] Chapter 5, 5 2 3 for a consideration of these limits in the context of state sovereignty and self-determination. See also Chapter 5, 5 4 3.
[61] Chapter 6, 6 3 4.

disproportionate impact on the global south and on the poor.[62] International assistance and cooperation therefore require concrete action for climate change mitigation and adaptation in order to safeguard the realisation of ESCRs by all States Parties, thereby promoting intragenerational equity. In particular, where the ability of a State Party to meet its core obligations under the Covenant is threatened by environmental degradation or climate change, all States Parties have an obligation to assist with the requisite urgency and priority.[63]

Although the Committee does not directly mention the principle of intragenerational equity, the spirit of intragenerational equity is embedded in the Covenant and the work of the Committee. This is evident in relation to the Committee's doctrine on equality, non-discrimination and international assistance and cooperation[64] as well as the Committee's repeated insistence that ESCRs of those who are most marginalised and disadvantaged must be prioritised.[65] The Committee emphasises its support for the most marginalised and disadvantaged individuals and groups in, for example, its statement in relation to "the pledge to leave no-one behind" in the 2030 Agenda for Sustainable Development.[66] It is therefore consistent with the provisions of the Covenant and the subsequent practice of the Committee to interpret States Parties' obligations to include intragenerational equity as a guiding principle. Understanding intragenerational equity in the Covenant from an environmental perspective means ensuring that certain individuals, groups and States Parties are not disproportionately impacted by environmentally harmful activities that threaten ESCRs and, that where undue environmental damage occurs, appropriate

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[62] See, for example, CESCR *CC and the ICESCR* para 4; UNHRC *Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment: Climate Change* (1 February 2016) A/HRC/31/52 para 27-29; UNHRC *Report of the Special Rapporteur on Extreme Poverty and Human Rights: Climate Change and Poverty* (17 July 2019) A/HRC/41/39 para 11-15.

[63] Chapter 6, 6 2 for a discussion of core obligations and the obligation to provide international assistance and cooperation.

[64] On equality and non-discrimination see, for example, CESCR *General Comment No 16*: *The Equal Right of Men and Women to the Enjoyment of all Economic, Social and Cultural Rights (Art 3 of the Covenant)* (11 August 2005) E/C12/2005/4; CESCR *General Comment No 20: Non-discrimination in Economic, Social and Cultural Rights (Art 2, Para 2, of the International Covenant on Economic, Social and Cultural Rights)* (2 July 2009) E/C12/GC/20. On international assistance and cooperation see, for example, CESCR *General Comment No 3* para 13-14; CESCR *General Comment No 12* para 36-41; CESCR *General Comment No 14* para 38-42 & 45; CESCR *General Comment No 15* para 30-36 & 38; CESCR *General Comment No* 24 para 11 & 30-35; CESCR *Public Debt, Austerity Measures and the ICESCR* para 7-9.

[65] See, for example, CESCR *General Comment No 14* para 18, 37 & 43(a); CESCR *General Comment No 15* para 7; CESCR *General Comment No 19* para 23 & 28; CESCR *Statement on the Coronavirus Disease (COVID-19) Pandemic and Economic, Social and Cultural Rights* (6 April 2020) E/C12/2020/1 para 2 & 5; CESCR *The Pledge to Leave No One Behind: The ICESCR and the 2030 Agenda* para 6-10.

[66] CESCR *The Pledge to Leave No One Behind: The ICESCR and the 2030 Agenda* para 6-10. See, for example, para 6 where the Committee states the following: "The concept of leaving no one behind in the 2030 Agenda is in its essence a commitment by States to prioritize the needs of the most disadvantaged and marginalized in realizing the Sustainable Development Goals".

compensation or assistance is provided, including environmental remediation and rehabilitation where possible.

7 3 3 Sovereignty over natural resources and the no-harm principle

The principle of state sovereignty over natural resources is an important component of IEL which is limited by its corollary, the no-harm principle or the prohibition of transboundary harm. States have the right to use and exploit their natural resources for the well-being of the people, but this is limited to the extent that a state's activities must not cause harm to the environment outside of its jurisdiction.[67] As De Schutter has observed, "[t]here is nothing that prohibits extending this [no-harm] principle, beyond environmental law, to human rights law".[68]

States Parties to the Covenant must ensure that they do not cause transboundary harm in their use of natural resources.[69] Any exercise of state sovereignty in relation to natural resources should be carried out with due diligence. This requires understanding the impacts and risks that natural resource use and exploitation hold for both the environment and ESCRs. States Parties must make appropriate use of EIAs and HRIAs (or integrated impact assessments).[70] Where the use or exploitation of natural resources will cause harm to human rights or the environment outside of the State Party's territory, the relevant activities must be avoided or prevented.[71] Given the role of corporations in natural resource exploitation, it is also important for States Parties to ensure that those private actors under their control are held responsible for harm caused as a result of natural resource exploitation in other territories.[72]

In relation to the availability of resources, any natural resources whose exploitation cannot be achieved without significant transboundary environmental harm should not be considered "available" for the realisation of ESCRs.[73] Similarly, shared resources should not be deemed

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[67] See Chapter 4, 4 3 2 2 for a discussion of sovereignty over natural resources and the no-harm principle.
[68] O De Schutter *International Human Rights Law: Cases, Materials, Commentary* 3 ed (2019) 197.
[69] See Chapter 5, 5 2 1 and Chapter 4, 4 3 2 2 2.
[70] See Chapter 5, 5 4 2 4 for an examination of impact assessments in the context of the exploitation of natural resources.
[71] The exploitation of natural resources and the human rights impacts thereof are examined at Chapter 5, 5 4. See also Chapter 5, 5 4 3.
[72] See Chapter 5, 5 4 2 3 where the exploitation of natural resources by private actors is examined. In this regard, see CESCR *General Comment No 24: State Obligations under the International Covenant on Economic, Social and Cultural Rights in the Context of Business Activities* (10 August 2017) E/C12/GC/24; UNHRC *Report of the Special Rapporteur on the Rights of Indigenous Peoples, James Anaya: Extractive Industries and Indigenous Peoples* (1 July 2013) A/HRC/24/41.
[73] This interpretation of availability of resources is presented at Chapter 5, 5 4 3.

available if their use or exploitation will cause harm that infringes on the territory and sovereignty of another State Party.[74]

Where core obligations are affected or threatened by transboundary environmental harm, there is a particular obligation on the responsible States Parties to provide international assistance and cooperation to the affected State Party. This should be done with the necessary urgency and priority required for the realisation of core obligations. This international assistance and cooperation should be required in addition to any compensation legally owed under IEL due to the failure to adhere to the no-harm principle.[75]

The prohibition of transboundary harm and its position in customary international law has been recognised by the Committee in General Comment 24 in the context of extraterritorial obligations.[76] There the Committee also confirms that this prohibition extends to human rights law.[77] States Parties are thus prohibited from engaging in activities that cause harm to ESCRs in another state's territory whether caused by environmental damage or not. It is important to note that, even if transboundary environmental harm does not have any direct impact on human rights, the responsible state remains liable under IEL in accordance with the no-harm principle. States Parties' general obligations under article 2(1) of the Covenant must be interpreted to include an obligation to avoid and prevent transboundary harm to the environment that poses a threat to ESCRs.

7 3 4 The preventive principle

The nature of environmental damage means that it is often incredibly costly to remedy, and rehabilitation is not always practically or financially feasible. In addition to this, significant environmental harm can be irreversible. This is why IEL underscores the importance of prevention in order to protect the environment from irreversible damage.[78] While the preventive principle overlaps with the no-harm principle, it is more comprehensive and includes the prevention of environmental harm irrespective of where it occurs.[79]

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[74] See Chapter 5, 5 4 3. See also Chapter 5, 5 2 with regard to sovereignty and self-determination.
[75] See Chapter 6, 6 2 2.
[76] CESCR *General Comment No 24: State Obligations under the International Covenant on Economic, Social and Cultural Rights in the Context of Business Activities* (10 August 2017) E/C12/GC/24 para 27. See also "Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights" (2011) 29 *Netherlands Quarterly of HR* 578-590.
[77] CESCR *General Comment No 24* para 27 with reference to UNHRC *Final Draft of the Guiding Principles on Extreme Poverty and Human Rights, Submitted by the Special Rapporteur on Extreme Poverty and Human Rights* (18 July 2012) A/HRC/21/39.
[78] See Chapter 4, 3 2 1 on the distinction between the overarching concept of prevention and the more particular preventive principle.
[79] The preventive principle is examined at Chapter 4, 4 3 2 3. The no-harm principle relates exclusively to transboundary environmental harm.

The prevention of environmental harm is vital for the realisation of ESCRs. Irreversible environmental damage is an immense threat to all ESCRs and cannot be overlooked in measures taken to advance Covenant rights.[80] The use of natural resources for the realisation of ESCRs must therefore be constrained, particularly for certain categories of natural resources, where the process of exploitation or extraction necessarily poses a significant risk of harm to the environment and to ESCRs.[81] The availability of natural resources is dependent on their ability to be utilised without a risk of unacceptable harm to the environment or ESCRs.[82]

Any exploitation of natural resources must also be accompanied by the due diligence required under the preventive principle.[83] This includes assessing the relevant activity's impact on the environment as well as on ESCRs.[84] Where an activity proceeds despite a risk to the environment, it is essential to ensure that any detrimental impacts are mitigated or minimised. Crucially, where a State Party's ability to meet core obligations is at risk, the preventive measures taken must be proportionate to the priority and urgency afforded to those core obligations by the Committee.[85]

Effective prevention of environmental harm will require States Parties to dedicate the necessary resources to environmental governance and regulation, as well as the enforcement of environmental laws.[86] Where States Parties already require EIAs for certain activities, it is important to include the requirement to assess how any identified environmental impacts will affect the realisation of ESCRs.[87] The preventive principle not only requires pro-active impact assessments before the approval of potentially harmful activities, but it also requires an ongoing duty of care for the duration of such activities, including continuous monitoring of activities and their associated risks.[88]

Measures to prevent environmental damage should be implemented in such a way that they have the least impact on individuals or groups who are already marginalised or

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[80] See Chapter 2, 2 2 1 and 2 3 1 on the threat of environmental harm to ESCRs. See also Chapter 5, 5 4 2 1 on the particular impacts of extractive industries on ESCRs.
[81] See Chapter 5, 5 4 2 and 5 4 3 in relation to an interpretation of availability that incorporates environmental limits.
[82] See Chapter 5, 5 4 3.
[83] See Chapter 4, 4 3 2 3. See also Chapter 5, 5 3 4 & 5 4 2 4 and CESCR *General Comment No 24* para 32 which states that "considering the well-documented risks associated with the extractive industry, particular due diligence is required with respect to mining-related projects and oil development projects".
[84] See Chapter 5, 5 4 2 4 in relation to human rights and environmental impact assessments in the context of natural resource exploitation.
[85] Chapter 6, 6 2 2 where preventive measures and core obligations are discussed.
[86] See Chapter 5, 5 3 3 regarding the use of resources for environmental protection.
[87] See Chapter 5, 5 4 2 4.
[88] See Chapter 5, 5 4 2 3 and 5 4 2 4.

disadvantaged. Any taxes imposed, subsidies granted, or fees charged in relation to environmental protection must be carefully considered with respect to how they might impact the ESCRs of those affected by the measures in question. This is important in the context of, for example, climate change mitigation and a just transition away from energy policies that centre on fossil fuels to more sustainable energy sources.[89] It would not be justifiable under the Covenant to promote environmental protection at the expense of the ESCRs of those who are marginalised or living in poverty.[90]

States Parties cannot effectively respect, protect and fulfil ESCRs if they are not proactive in preventing irreversible environmental harm that will ultimately inhibit their ability to meet their obligations under the Covenant. The Committee has, for example, recognised the "massive threat" to ESCRs posed by climate change and the obligation of preventing foreseeable harm resulting from climate change.[91] The Committee has also recommended the prevention of environmental harm in some of its concluding observations.[92] Given the long-term and potentially irreversible impacts of environmental harm it is important that, wherever possible, environmental threats to ESCRs are prevented rather than mitigated or remedied after the fact. Any effective interpretation of the Covenant must include the protection of the environment and the prevention of environmental harm in order to safeguard the underlying environmental determinants of ESCRs.

7 3 5 Precautionary principle

The precautionary principle is an extension of prevention for circumstances where there is scientific uncertainty surrounding environmental impacts.[93] Applying the precautionary principle requires the prevention of significant environmental harm even where it is not certain that such harm will occur or where the nature or extent of the harm is uncertain. Given the uncertain nature of predicting future impacts, this principle ensures that potentially harmful activities are not permitted simply on the basis of the uncertainty of environmental harm. The principle also requires proactive precautionary action to be taken in order to

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[89] With regard to a just transition, see UNGA *Interim Report of the Special Rapporteur on Extreme Poverty and Human Rights, Olivier De Schutter: The "Just Transition" in the Economic Recovery: Eradicating Poverty within Planetary Boundaries* (7 October 2020) A/75/181/Rev1. See also CESCR *The Pledge to Leave No One Behind: The ICESCR and the 2030 Agenda* para 6-10 in relation to prioritising marginalised and disadvantaged individuals and groups.

[90] See Chapter 5, 5 6 2 on the equitable use of resources.

[91] CESCR *Climate Change and the International Covenant on Economic, Social and Cultural Rights* (31 October 2018) E/C12/2018/1 para 1 & 6. See also para 4 where the Committee outlines the human rights implications of climate change.

[92] See, for example, CESCR *Concluding Observations, Mali* (6 November 2018) E/C12/MLI/CO/1 para 44; CESCR *Concluding Observations, The Netherlands* (23 June 2017) E/C12/NLD/CO/6 para 12.

[93] The precautionary principle is examined at Chapter 4, 4 3 2 4.

prevent uncertain but significant environmental harm. Protecting ESCRs from the impacts of environmental damage requires appropriate application of the precautionary principle. Where there is a significant risk to ESCRs as a result of environmental harm, this must be prevented, whether or not detrimental consequences are certain.

Applying the precautionary principle means limiting the use of natural resources where there is an uncertain risk of significant harm.[94] Impact assessments should be comprehensive and assess all possible harm as a result of the relevant activities, including uncertain impacts. Where impact assessments indicate significant potential harm, the proposed activity should be avoided or prevented.[95] Although the financial revenue from natural resource exploitation can advance ESCRs, this benefit must be weighed against the extent of the harm to ESCRs as a result of potential environmental degradation.[96] This involves a proportionality enquiry: the more significant the scope of potential harm, the more stringently the precautionary principle should be applied. In relation to private actors, the precautionary principle should be applied to licensing applications for natural resource exploitation by placing a burden of proof on these private actors to show that significant harm to the environment and ESCRs will not occur.[97]

Appropriate application of the precautionary principle can safeguard the ability of States Parties to realise ESCRs both now and in the future by preventing environmental damage that may last for generations. Even where the likelihood and scope of harm cannot be precisely determined, it is important that States Parties exercise caution when taking measures to implement ESCRs that might have a detrimental impact on the environment.[98]

In relation to core obligations, the standard of precaution applied to environmental threats must be even higher. Where a particular measure poses an uncertain but significant risk to the minimum core of ESCRs, the State Party must exercise considerable caution. This is particularly important where basic subsistence rights are at risk. Similarly, a higher standard of precaution is required where there is a risk to environmental functions and ecosystems that are essential to the guarantee of core obligations.[99] In such cases, States Parties have

[94] See, for example, Chapter 5, 5 2 3, 5 3 3 & 5 4 3.
[95] See Chapter 5, 5 4 2 1 and 5 4 2 4.
[96] See Chapter 5, 5 4 2 2 on the exploitation of natural resources by States Parties for financial revenue. As noted in that section, where States Parties generate financial revenue from natural resource exploitation, they are obligated to use the benefits thereof for the well-being of the people.
[97] See Chapter 5, 5 4 2 3 in regard to the exploitation of natural resources by private actors.
[98] See Chapter 6, 6 3 4.
[99] See Chapter 6, 6 2 2. This section also argues for the identification of the environmental functions and ecosystems that comprise the minimum environmental conditions necessary to meet core obligations.

a positive obligation to take precautionary action to prevent the relevant potential harm to the environment and ESCRs.

Where precautionary action is taken to prevent harm it may, in rare circumstances, necessitate retrogression. As noted above, this should only be considered by States Parties as a last resort and after the use of the maximum of available resources.[100] In such instances the harm of the retrogressive measures proposed to prevent environmental damage must be weighed against the severity of the potential harm to the environment and ESCRs if no preventive action is taken.[101] Any such retrogressive measures must be necessary, temporary, proportional and non-discriminatory.[102]

It is noteworthy that in the last few years the Committee has made explicit reference to the precautionary principle on three occasions. First, in its 2018 concluding observations in relation to Argentina the Committee recommended that the precautionary principle be included in the State Party's regulatory framework dealing with the use of potentially harmful pesticides and herbicides.[103] In 2019, the Committee recommended that Israel conduct impact assessments regarding the spraying of potentially harmful herbicides, stating that, pending the results, "the State party should, on the basis of the precautionary principle, cease such spraying".[104] Finally, in General Comment 25 the Committee refers to the principle in the context of scientific research and explains that the precautionary principle "demands that, in the absence of full scientific certainty, when an action or policy may lead to unacceptable harm to the public or the environment, actions shall be taken to avoid or diminish that harm".[105] These recent references to the precautionary principle suggest a growing acceptance by the Committee of the relevance of the principle for ESCRs and the implementation of the Covenant. Article 2(1) should therefore be interpreted to include an obligation on States Parties to prevent significant or irreversible environmental harm that will affect the enjoyment of ESCRs, even where there is uncertainty regarding the likelihood or scope of the harm.

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[100] See Chapter 6, 6 4 2.
[101] See Chapter 6, 6 4 3 where it is proposed that a proportionality inquiry be used in such circumstances.
[102] See *Djazia and Bellili v Spain* Communication No 5/2015, E/C12/61/D/5/2015 (2017) CESCR para 17.6. See also CESCR *General Comment No 19* para 42; CESCR *Public Debt, Austerity Measures and the ICESCR* para 4; CESCR *An Evaluation of the Obligation to Take Steps to the "Maximum of Available Resources"* para 10.
[103] CESCR *Concluding Observations, Argentina* (1 November 2018) E/C12/ARG/CO/4 para 60.
[104] CESCR *Concluding Observations, Israel* (12 November 2019) E/C12/ISR/CO/4 para 45.
[105] CESCR *General Comment No 25 on Science and Economic, Social and Cultural Rights* (Art 15(1)(b), 15(2), 15(3) and 15(4)) (7 April 2020) E/C12/GC/25 para 56. See also paras 57 & 71.

7 3 6 Polluter pays principle

The polluter pays principle requires the internalisation of costs in relation to environmental harm and related remediation and rehabilitation. According to the polluter pays principle the costs associated with pollution must be borne by those who are responsible in order to ensure that the general public and the state are not burdened with a degraded natural environment or the loss of funds directed at environmental remediation or rehabilitation.[106] Appropriate use of the polluter pays principle protects the natural and financial resources of States Parties from the undue burden of remedying harm caused by polluters. This also supports intragenerational equity and ensures that instead of (often poorer) communities bearing the brunt of pollution, private actors that benefit from polluting activities will bear the cost.[107]

In order to use the "maximum of available resources" for the realisation of ESCRs in accordance with article 2(1) of the Covenant, it is vital that States Parties' natural resources are protected from pollution by private actors. States Parties' financial resources must not be unduly redirected towards cleaning up after those who have profited from polluting activities. A failure to appropriately apply the polluter pays principle means that rights-holders bear the brunt of polluting industries either through a degraded environment impacting on ESCRs or through the inappropriate use of public funds to support polluters' activities.[108]

In the context of the Covenant it is important that polluters are held responsible not only for environmental harm caused in accordance with IEL, but also for the related impacts on ESCRs. This requires accurate and comprehensive assessments of the costs associated with the pollution that also take their long-term impacts into account. A superficial application of the polluter pays principle that fails to take long-term impacts and costs into account will result in insufficient compensation, leaving a large gap to be filled with public funds, either at the time of the pollution or in the future when further detrimental impacts materialise.[109]

Protecting ESCRs through the use of the polluter pays principle requires legislative measures at a national and international level that take appropriate account of the full range of impacts and allow for a comprehensive determination of compensation under the polluter

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[106] The polluter pays principle is examined at Chapter 4, 4 3 3. See P Schwartz "The Polluter-Pays Principle" in L Krämer & E Orlando (eds) *Principles of Environmental Law* (2018) 260 265-268 for examples of mechanisms for the internalisation of environmental costs.
[107] See Chapter 5, 5 3 3. See also 5 6 2 in relation to the equitable use of resources.
[108] See Chapter 5, 5 3 3 and 5 5 2.
[109] See Chapter 5, 5 3 3 as well as Chapter 6, 6 3 3 1 and 6 3 4 in relation to the long-term impacts of polluting activities.

pays principle, as well as for remediation and rehabilitation where possible.[110] Effective enforcement of legislation providing for the polluter pays principle is also vital. In the absence of effective enforcement of the polluter pays principle, States Parties are at risk of being unexpectedly burdened with significant costs related to emergency clean-up operations that may reduce ESCR budgets and could result in retrogressive measures.[111]

Comprehensive application of the polluter pays principle in domestic and international law is essential for the protection of ESCRs and the environment, and supports equitable distribution of the costs of environmental degradation. It is clear that it would be wholly inconsistent with the Covenant to protect the financial interests of private actors engaged in polluting activities at the expense of the environment and the ESCRs of affected communities and the broader public. The Committee has recommended that States Parties prevent pollution and environmental harm. However, aside from insisting that those affected are compensated for harm, it has rarely addressed the question of costs associated with the rehabilitation and remediation of the environment.[112] It is important to ensure that those responsible for harm to the environment bear the costs for remediation and rehabilitation of the affected environment through appropriate legislation and enforcement. This protects ESCRs from the short- and long-term effects of a degraded natural environment as well as from any reduction in public funds that may be unduly directed at rehabilitating the environment on behalf of polluters.

7 3 7 Common but differentiated responsibilities

The principle of common but differentiated responsibilities ("CBDR") has a degree of overlap with the polluter pays principle in that both principles seek to ensure fairness by placing the responsibility for environmental harm on the shoulders of those who cause it.[113] CBDR aims to balance the needs and interests of states at different levels of development, taking into account their relative contributions to global environmental harm, as well as their respective capabilities to address environmental harm.[114] Viewing CBDR from the

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[110] See Chapter 5, 5 3 3 & 5 6 3 as well as Chapter 6, 6 3 4.
[111] See Chapter 5, 5 6 3. In relation to retrogressive measures, see Chapter 6, 6 4 2.
[112] See, for example, CESCR *Concluding Observations, Guinea* (30 March 2020) E/C12/GIN/CO/1 para 17 where the Committee recommends that the State Party ensure appropriate assessment and monitoring in relation to impacts on ESCRs and provide compensation to affected individuals and communities. The Committee does not address the question of the costs associated with rehabilitation and remediation of the environment once the extractive activities are decommissioned. See also CESCR *Concluding Observations, China, including Hong Kong, China, and Macao, China* (13 June 2014) E/C12/CHN/CO/2 para 32. See also Chapter 5, 5 4 2 3 in relation to CESCR *Concluding Observations, Mali* (6 November 2018) E/C12/MLI/CO/1 para 44.
[113] See Chapter 4, 4 3 4. See also U Beyerlin & T Marauhn *International Environmental Law* (2011) 64.
[114] The principle of CBDR is examined in detail at Chapter 4, 4 3 4.

perspective of the Covenant requires considering how ESCRs within certain States Parties are disproportionately impacted by global environmental challenges that arise from the actions of other States Parties. CBDR promotes intragenerational equity by recognising that those States Parties that have contributed significantly to climate change and global environmental degradation also have a corresponding responsibility to prevent further harm and provide assistance to the most affected States Parties.

The Covenant provides for international resources to be used for the realisation of ESCRs in the form of international assistance and cooperation.[115] When read with the principle of CBDR, States Parties are under a particular obligation to provide such assistance and cooperation where their actions have contributed to environmental harm that threatens ESCRs in other jurisdictions.[116] States Parties affected by such harm should seek assistance from those that bear greater responsibility for the harm caused.[117] The provision of international resources in accordance with article 2(1) of the Covenant is an obligation that States Parties must meet in addition to any other obligations that may exist under IEL as a result of transboundary environmental harm caused.[118]

The principle of CBDR also underscores the importance of providing international assistance and cooperation to respond to environmental challenges such as climate change that threaten the progressive realisation of ESCRs.[119] For example, the Covenant should be interpreted to include international assistance and cooperation by means of climate change mitigation and adaptation in order to secure the resilience and sustainability of ESCRs over the long term. The form of international resources provided under article 2(1) could therefore include resources related to environmental protection or climate change adaptation where these challenges pose a threat to ESCRs.[120] The provision of international assistance and cooperation should also be guided by CBDR and intragenerational equity, focusing on those who are most severely affected by climate change and the related impacts on ESCRs.

The obligation of international assistance and cooperation is more stringent where core obligations are concerned. Taking the principle of CBDR into account, there is a particularly strong obligation to provide international resources for the realisation of core obligations

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[115] In relation to the obligation of international assistance and cooperation, see Chapter 5, 5 3 1.
[116] See Chapter 5, 5 3 3 and 5 4 3.
[117] See Chapter 5, 5 3 3.
[118] See Chapter 5, 5 4 3. See also Chapter 4, 4 3 2 2 2 on the prohibition of transboundary harm under IEL.
[119] See Chapter 6, 6 3 4.
[120] Chapter 6, 6 3 4. See, for example, CESCR *Concluding Observations, Mauritius* (5 April 2019) E/C12/MUS/CO/5 para 10; CESCR *Concluding Observations, Bangladesh* (18 April 2018) E/C12/BGD/CO/1 para 14. See also CESCR *Concluding Observations, Denmark* (12 November 2019) E/C12/DNK/CO/6 para 14-15 where the Committee commended the States Party's contribution to the Green Climate Fund.

where, for example, States Parties bear responsibility for the climate change that causes the harm in question.[121]

The principle of CBDR has not been directly referenced by the Committee in its general comments, statements or concluding observations. It does, however, form part of the UN Framework Convention on Climate Change [122] and the related Paris Agreement,[123] both of which have been supported by the Committee. On a number of occasions, the Committee has urged States Parties to meet their commitments in terms of these climate change agreements.[124] Many States Parties are therefore already required to apply the principle of CBDR in that sphere. In the context of article 2(1) of the Covenant, the principle is useful in providing a framework for prioritising and coordinating States Parties' duties under the obligation of international assistance and cooperation. It is important to stress that the use of this principle as a guide for the interpretation of the Covenant does not remove any additional legal responsibility on States Parties for harm caused under IEL. The principle of CBDR also does not substantively alter the international obligations under article 2(1), but it serves as a guide for States Parties' action by ensuring that the extent of international cooperation and assistance is commensurate with States Parties' responsibility for the environmental harm that threatens ESCRs.

7 3 8 Conclusion

The principles of IEL thus demonstrate how the obligations under article 2(1) of the Covenant should be interpreted to include environmental considerations. In some instances, the Committee's work reveals support for these principles, for example in the case of intergenerational equity and the precautionary principle, although a number of the principles discussed above have not been explicitly endorsed by the Committee. However, it is evident that referring to these principles to guide the interpretation of article 2(1) is consistent with a teleological interpretation of the Covenant that is effective and evolves appropriately with

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[121] See Chapter 6, 6 2 2 with respect to core obligations and the obligation of international assistance and cooperation.
[122] UN Framework Convention on Climate Change (adopted 9 May 1992, entered into force 21 March 1994) 1771 UNTS 107.
[123] UNFCCC, Conference of the Parties on its Twenty-First Session, Adoption of the Paris Agreement (adopted 12 December 2015, entered into force 4 November 2016) Decision 1/CP21, UN Doc FCCC/CP/2015/L9/Rev1.
[124] See, for example, CESCR *Concluding Observations, Ukraine* (4 January 2008) E/C12/UKR/CO/5 para 4; CESCR *Concluding Observations, Cambodia* (12 June 2009) E/C12/KHM/CO/1 para 7; CESCR *Concluding Observations, Germany* (27 November 2018) E/C12/DEU/CO/6 para 19; CESCR *Concluding Observations, Norway* (2 April 2020) E/C12/NOR/CO/6 para 11; CESCR *Concluding Observations, Ecuador* (14 November 2019) E/C12/ECU/CO/4 para 12; CESCR *Concluding Observations, Australia* (11 July 2017) E/C12/AUS/CO/5 para 11.

changing circumstances. Reliance on the principles of IEL for a green interpretation of the Covenant also facilitates the harmonisation of IEL with international human rights law.

7 4 Greening States Parties' obligations: Proposed obligations

7 4 1 Introduction

As demonstrated above, the Covenant imposes certain obligations on States Parties that relate to the environment. Chapters 5 and 6 analyse the concepts of maximum available resources, core obligations, progressive realisation and retrogression in order to explore and delineate some of these environment-related obligations that arise from a teleological interpretation of the Covenant. This dissertation has referred to a wide range of environment-related obligations that should be imposed on States Parties in greening article 2(1). The most significant of these are synthesised and highlighted here.

7 4 2 Maximum available resources

Greening the obligation to use "the maximum of available resources" for the realisation of ESCRs requires the active integration of environmental considerations within the notion of resources, with particular attention to the role of natural resources. Viewed qualitatively, natural resources must be understood in light of their role as fundamental determinants of ESCRs and States Parties should therefore invest in their protection.[125] Resources must be devoted to environmental protection to the extent that it is necessary to prevent related harm to ESCRs. With reference to the availability of resources, natural resources must be deemed unavailable for use where it is not possible to exploit them in accordance with the principle of sustainable use,[126] or where their extraction or exploitation will result in harm to Covenant rights.[127]

In order to ensure the effective use of resources,[128] States Parties must require appropriate use of EIAs and HRIAs prior to making decisions regarding activities that may cause harm to the environment and ESCRs.[129] This is essential to ensuring that decision-

[125] See Chapter 5, 5 3 1 and 5 6 3 where this is argued for in the context of a qualitative approach to resources. See S Skogly "The Requirement of Using the Maximum of Available Resources for Human Rights Realisation: A Question of Quality as Well as Quantity" (2012) 12 *Human Rights Law Review* 393-420.
[126] In relation to sustainable use, see Chapter 4, 4 3 1 3 and 7 3 2 2 above.
[127] See Chapter 5, 5 4 3 with regard to environmental limits to available resources.
[128] See Chapter 5, 5 6 2. See also "The Limburg Principles on the Implementation of the International Covenant on Economic, Social and Cultural Rights" (1987) 9 *HR Quarterly* 122-135 para 27.
[129] Impact assessments are examined at Chapter 5, 5 4 2 4 above. For examples of the Committee requiring impact assessments, see OHCHR *Mapping Human Rights Obligations relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment: Individual Report on the International Covenant on Economic, Social and Cultural Rights* (December 2013) paras 46-51.

makers take all relevant risks and impacts into account. Such impact assessments are particularly important, and must be mandated, wherever the exploitation of natural resources is concerned.[130] Greening the requirement of effective use of resources includes an obligation to prevent corruption and mismanagement in relation to environmental resources, including through environmental legislation and related enforcement.[131] Such environmental laws must also provide for the comprehensive application of the polluter pays principle.[132]

In addition to effective use, States Parties are obligated to use resources equitably. From an environmental perspective, this requires States Parties to promote the equitable distribution of environmental resources as well as environmental costs. Where measures are taken to protect the environment or natural resources, such measures must have the least detrimental impact on individuals and communities that are already marginalised and disadvantaged. Similarly, resources allocated towards environmental protection should be targeted according to the needs of those communities where the brunt of environmental degradation and pollution is felt.[133] Wherever private actors benefit from environmental harm, for example in relation to natural resource exploitation, States Parties must also protect local communities from the impacts of these activities. This should be done through appropriate mechanisms such as licensing processes and fees, taxation of profits,[134] financial provisioning for future environmental impacts[135] and appropriate compensation for harm.[136] With respect to licensing and approval processes, it is vital that local communities are given opportunities for participation and consultation and, in the case of indigenous communities, that all private actors respect the right of FPIC.[137]

An interpretation of the obligation to use the maximum of available resources that incorporates environmental considerations, therefore includes the following obligations on

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[130] The exploitation of natural resources is addressed in detail at Chapter 5, 5 4 2.
[131] See Chapter 5, 5 6 1 and 5 6 3 in relation to effective use States Parties' obligations related to preventing corruption.
[132] See Chapter 4, 4 3 3 and 7 3 6 above in relation to the polluter pays principle.
[133] See CESCR *The Pledge to Leave No One Behind: The ICESCR and the 2030 Agenda* para 6-10. See Chapter 5, 5 6 2.
[134] See Chapter 5, 5 4 1 in relation to progressive taxation.
[135] See Chapter 5, 5 6 3 where it is argued that States Parties should require financial provisioning for future environmental harm from the proponents of potentially harmful activities.
[136] See, for example, CESCR *Cameroon* (2019) para 16-18; CESCR *Mali* (2018) para 43-44. See also O De Schutter "Public Budget Analysis for the Realization of Economic, Social and Cultural Rights: Conceptual Framework and Practical Implementation" in K Young (ed) *The Future of Economic and Social Rights* (2019) 527 568-569.
[137] See, for example, CESCR *Ecuador* (2004) para 35; CESCR *Concluding Observations, Mexico* (9 June 2006) E/C12/MEX/CO/4 para 10; CESCR *Cambodia* (2009) para 15; CESCR *Russian Federation* (2017) para 15; CESCR *Australia* (2017) para 16; CESCR *Philippines* (2016) para 14; CESCR *Canada* (2016) para 14. CESCR *New Zealand* (2018) para 9; CESCR *Mali* (2018) paras 43-44; CESCR *Concluding Observations, Cameroon* (25 March 2019) E/C12/CMR/CO/4 paras 16-17.

States Parties: (1) to consider environmental factors in decisions related to resource use, mobilisation and allocation; (2) to devote the necessary resources to the protection of the environment so as to prevent related harm to ESCRs; (3) to use resources sustainably and place limitations on resource use that is harmful to the environment or unsustainable; (4) to ensure the effective use of the environment and natural resources for the realisation of ESCRs; (5) to ensure that the use and exploitation of natural resources does not harm or threaten ESCRs, including through undertaking environmental and human rights impact assessments; and (6) to prevent activities related to the exploitation of natural resources where the benefit of such exploitation does not outweigh the impacts on the environment and ESCRs.

7 4 3 Core obligations

Under the Covenant, core obligations must be met with particular priority and urgency.[138] Greening the Covenant therefore requires a commensurate prioritisation of aspects of the environment that are essential for meeting core obligations. States Parties must determine the nature and extent of the baseline environmental conditions required to meet their core obligations. These minimum environmental conditions must then be protected through the use of all necessary measures and with the appropriate urgency and priority. Where the core of ESCRs is threatened by activities that may cause environmental harm, the standard of precaution exercised must be proportionate to the extent of the potential harm to ESCRs. The standard of precaution exercised must therefore be particularly rigorous where basic subsistence is threatened.

The Committee has emphasised that obligations of international assistance and cooperation are particularly stringent where core obligations are concerned.[139] In light of this, States Parties have a particular obligation to provide assistance and cooperation to States Parties whose core obligations are under threat as a result of the impacts of environmental degradation and climate change. This obligation is further underscored by the principles of intragenerational equity and CBDR, especially where climate change is

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[138] See CESCR *General Comment No 3* para 10; CESCR *General Comment No 15* para 6; CESCR *General Comment No 17* para 41; CESCR *General Comment No 19* para 60; CESCR *General Comment No 25* para 51; CESCR *Statement on the Coronavirus Disease (COVID-19) Pandemic and ESCRs* para 12. See Chapter 6, 6 2 on core obligations.

[139] See, for example, See CESCR *General Comment No 8* para 7; CESCR *General Comment No 14* para 45; CESCR *General Comment No 15* para 37-38; CESCR *General Comment No 17* para 40; CESCR *General Comment No 19* para 61; CESCR *General Comment No 25* para 51.

concerned.[140] Adequate international assistance and cooperation in this regard must include international cooperation for the mitigation of climate change as well as assistance in relation to climate change adaptation for the most affected States Parties where the core of ESCRs is at risk.[141]

Integrating environmental considerations within core obligations under the Covenant therefore entails the following obligations on States Parties: (1) to prevent and avoid impacts on the environment, ecosystems and environmental functions that are integral to the realisation of the minimum core of ESCRs; (2) to determine the baseline of minimum environmental conditions, both globally and within the State Party's territory, on which core obligations depend and to prioritise the protection of this environmental base through all necessary measures; (3) to apply the precautionary principle to all activities that may result in significant harm to the environment and to exercise particular precaution where there is any risk of environmental harm that would affect the ability of States Parties to meet their core obligations.

7 4 4 Progressive realisation and non-retrogression

Article 2(1) places an obligation on States Parties to take steps "with a view to achieving progressively the full realization" of the rights in the Covenant. An interpretation that is appropriately evolutive and effective must understand "the full realization" of ESCRs in the context of present-day environmental conditions. The level of enjoyment of ESCRs that is understood as "full realization" must therefore be attainable for all in light of the thresholds of natural resources, planetary boundaries, and any other relevant environmental limitations. This full realisation can be viewed as the ceiling of ESCRs and of the obligation of progressive realisation.[142]

Incorporating environmental considerations into article 2(1) requires States Parties to take the environment into account in any plans, programmes and policies aimed at the progressive realisation of ESCRs. In choosing measures to progressively realise ESCRs, States Parties must assess the impacts of such measures on the environment and,

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[140] See, for example, CESCR *Climate Change and the ICESCR* para 7; CESCR *The Pledge to Leave No One Behind: The ICESCR and the 2030 Agenda*; UNHRC *Climate Change and Poverty* (2019) A/HRC/41/39 para 14-15.

[141] See CESCR *CC and the ICESCR* para 7; CESCR *The Pledge to Leave No One Behind: The ICESCR and the 2030 Agenda* para 6-8. See also CESCR *Concluding Observations, Belgium* (26 March 2020) E/C12/BEL/CO/5 para 14-15; CESCR *Mauritius* (2019) para 10; CESCR *Bangladesh* (2018) para 14.

[142] As noted above at Chapter 6, 6 3 4 States Parties are free to provide for those in their jurisdictions at levels in excess of this ceiling with the caveat that in doing so they do not cause harm to the environment or ESCRs. Any such provision in excess of this ceiling of full realisation would not fall within the scope of Covenant obligations.

wherever possible, select those measures that have the least harmful consequences for the environment and ESCRs. In addition to this, States Parties must consider and assess the impacts of any steps towards environmental protection on marginalised and disadvantaged individuals and communities. As these sectors of society often bear a disproportionate burden of pollution and environmental harm, it is critical that they do not also bear the burden of measures to protect the environment. Where measures are implemented for the sustainable use of natural resources, environmental protection, pollution prevention or similar interventions, States Parties must ensure that they do not have inequitable or disproportionate impacts on marginalised or disadvantaged individuals and communities.

Progressive realisation does not only require that States Parties attain a certain level of enjoyment of ESCRs, it also requires that such levels are maintained.[143] In order to realise and maintain ESCRs, and thereby to prevent retrogression, States Parties must ensure the long-term viability of measures taken as well as the sustainable use of resources. This includes, for example, the obligation to plan and budget for the management, operation and maintenance of infrastructure in order to avoid retrogression resulting from poorly planned measures.[144] Maintaining levels of attainment of ESCRs also requires a concerted effort from States Parties to provide for climate change mitigation and adaptation, both within their jurisdictions as well as through international assistance and cooperation, in order to avoid retrogression as a result of climate change impacts.

In relation to intergenerational equity, there is an obligation on States Parties to take the rights of future generations into account when making decisions regarding to the progressive realisation of Covenant rights. The Committee has already affirmed that environmental harm is unacceptable where it is inequitable to present and future generations.[145] States Parties must therefore promote intergenerational equity in decisions related to the environment by preventing inequitable harm and protecting the environment for future generations. Measures that support a healthy environment for both present and future generations must be preferred over those that do not.

Under an interpretation of progressive realisation that incorporates environmental considerations, States Parties therefore have an obligation: (1) to consider the environment in determining measures for the progressive realisation of ESCRs and to select those

[143] See CESCR *General Comment No 3* para 9.
[144] See Chapter 5, 5 6 1 and Chapter 6, 6 4 3. See also UNHRC *Report of the Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation* (2013) A/HRC/24/44.
[145] CESCR *General Comment No 25* para 56. The Committee defines unacceptable in respect of scientific processes to include harm to humans or the environment that is “inequitable to present or future generations”.

measures that realise ESCRs while also protecting the environment and future generations; (2) to ensure that the progressive realisation of ESCRs is sustainable, particularly in relation to the use of natural resources; (3) to avoid unacceptable harm to the environment that would be inequitable to present or future generations, including by safeguarding the minimum baseline of environmental conditions necessary to realise core obligations in future; and (4) to incorporate the needs of future generations into long-term plans for the realisation of ESCRs.

7 4 5 International assistance and cooperation

Article 2(1) requires States Parties to take steps "individually and through international assistance and cooperation, especially economic and technical" to progressively realise ESCRs. International assistance and cooperation was not analysed in particular detail in this dissertation, except to the extent relevant for the examination of maximum available resources, core obligations, progressive realisation, and non-retrogression. However, a number of relevant environment-related obligations were identified, particularly in the context of maximum available resources and core obligations.

With regard to maximum available resources, States Parties' consideration of available resources must include international resources obtained through international assistance and cooperation.[146] This is particularly important in relation to environmental challenges of a transboundary or global nature. States Parties must provide international assistance and cooperation in order to address environmental degradation and climate change that poses a risk to the realisation of ESCRs. States Parties must also provide assistance and cooperate by sharing any scientific and technological research, training and expertise that are essential for environmental protection as well as climate change mitigation and adaptation.[147]

The Committee has made it clear that the obligation of international assistance and cooperation is of particular importance where core obligations are concerned.[148] States Parties are obligated to provide assistance and cooperation to any State Party that is unable

[146] International resources are examined at Chapter 5, 5 3 1.
[147] See CESCR *General Comment No 25* para 79; CESCR *Climate Change and the International Covenant on Economic, Social and Cultural Rights* (31 October 2018) E/C12/2018/1 para 7; CESCR *The Pledge to Leave No One Behind: The ICESCR and the 2030 Agenda* para 16.
[148] See CESCR *General Comment No 8* para 7; CESCR *General Comment No 14* para 45; CESCR *General Comment No 15* para 37-38; CESCR *General Comment No 17* para 40; CESCR *General Comment No 19* para 61; CESCR *General Comment No 25* para 51; CESCR *Poverty and the ICESCR* (10 May 2001) E/C12/2001/10 para 16-18; CESCR *Human Rights and Intellectual Property* (14 December 2001) E/C12/2001/15 para 12-13; CESCR *Duties of States towards Refugees and Migrants under the ICESCR* para 18. See also Chapter 6, 6 2 1.

to meet its core obligations, and to act with the requisite urgency and priority. From an environmental perspective, this includes an obligation on States Parties to provide assistance and cooperation in relation to climate change mitigation and adaptation in areas where climate change threatens the ability of a State Party to meet its core obligations.

States Parties must promote the principle of CBDR in international law and target efforts of international assistance and cooperation accordingly, with particular attention to assisting those States Parties that are severely and disproportionately affected by climate change, such as small island developing states.[149] Those States Parties with the most responsibility for climate change have a stronger obligation to provide international assistance and cooperation in that regard, including through appropriate adjustments to their energy policies.[150] In addition, States Parties seeking international assistance should be guided by the principle of CBDR when requesting assistance related to climate change adaptation and mitigation.

An interpretation of article 2(1) that incorporates the environment therefore includes obligations to provide international assistance and cooperation through: (1) addressing environmental degradation and climate change that pose a threat to ESCRs, particularly where core obligations are at risk; (2) sharing scientific and technological resources in relation to environmental protection and climate change mitigation and adaptation; and (3) mitigating climate change by making changes to the State Party's own energy policies. States Parties in need of resources to protect ESCRs from environmental harm also have an obligation under the Covenant to seek international assistance and cooperation. Finally, in meeting these obligations to seek and to provide international assistance and cooperation States Parties must be guided by the principle of CBDR.

7 5 Principles and factors to guide decision-making

This dissertation has argued that environmental protection is a necessary and fundamental measure for States Parties to take in the interests of the progressive realisation of ESCRs. However, a degree of environmental harm is sometimes unavoidable, and

[149] See also CESCR *CC and the ICESCR* para 7 where the Committee notes that "high-income States should also support adaptation efforts, particularly in developing countries, by facilitating the transfer of green technologies, and by contributing to the Green Climate Fund". See also CESCR *The Pledge to Leave No One Behind: The ICESCR and the 2030 Agenda* para 6-8.

[150] See, for example, CESCR *Climate Change and the ICESCR* para 6; CESCR *Concluding Observations, Canada* (23 March 2016) E/C12/CAN/CO/6 para 54; CESCR *Concluding Observations, Australia* (11 July 2017) E/C12/AUS/CO/5 para 12; CESCR *Concluding Observations, Russian Federation* (6 October 2017) E/C12/RUS/CO/6 para 43; CESCR *Concluding Observations, Argentina* (1 November 2018) E/C12/ARG/CO/4 para 14; CESCR *Concluding Observations, New Zealand* (1 May 2018) E/C12/NZL/CO/4 para 9; CESCR *Concluding Observations, Germany* (27 November 2018) E/C12/DEU/CO/6 para 19.

perhaps inevitable, as a result of the development that is required for the realisation of ESCRs, particularly were low-income developing and least developed states are concerned. As both development and environmental protection are essential for the protection and realisation of Covenant rights, it is crucial for States Parties to balance these interests carefully in deciding on the most appropriate measures to realise ESCRs.

Although this dissertation has not explored these complex and multi-faceted decisions in detail, Chapters 5 and 6 refer to a number of principles and factors that can guide States Parties' decision-making in this regard. It is therefore useful to reiterate these here. Before outlining the factors and principles below, it is important to emphasise that, wherever possible within the maximum of available resources, States Parties are required to realise ESCRs while also protecting the environment that Covenant rights depend on. These factors and principles are tools to identify those circumstances in which a degree of environmental harm can be justified due to limited resources and alternatives, and to guide decision-making in that regard.

First, any decisions regarding measures to realise ESCRs must take into account all relevant risks and potential impacts. This requires the appropriate use of EIAs and HRIAs.[151] Impacts on ESCRs resulting from the potential environmental harm must be measured against the benefits for ESCRs if the environmentally harmful activity proceeds. The precautionary principle has an important role to play in this regard.[152] Where scientifically uncertain environmental harm poses a significant risk to ESCRs, the harm should be prevented and avoided. The proportionality of all potential risks and benefits should also be carefully considered. Significant environmental harm must not be justified in the interests of minimal gains in the realisation of ESCRs.

In deciding on appropriate measures for the realisation of ESCRs, States Parties are also required not to discriminate, and to pay particular attention to the position of the most marginalised and disadvantaged.[153] This requires States Parties to take note of which individuals and groups stand to benefit from an activity that may harm the environment, as well as noting who will bear the brunt of the environmental harm if the activity were to proceed. Wherever possible States Parties should avoid environmental harm while also providing additional assistance to those who are disproportionately affected by, for example,

[151] Impact assessments are explored at Chapter 5, 5 4 2 4.
[152] See Chapter 4, 4 3 2 4 and 7 3 5 above.
[153] See Chapter 5, 5 6 2.

unemployment or increased costs of energy and transport.[154] Where necessary, States Parties should use progressive taxation and other mechanisms to protect the poor from any disproportionate impacts.[155]

Other important factors include the extent to which the minimum core is threatened, either by potential environmental harm or by a failure to pursue environmentally harmful development. The factors and principles identified by the Committee in the context of retrogressive measures are also relevant wherever retrogression might occur. These are explored in detail in Chapter 6.[156]

Finally, the obligation of international assistance and cooperation should be considered.[157] Wealthy States Parties are required to provide assistance and cooperation for the progressive realisation of ESCRs, including for the protection of the environmental base on which the rights depend. As noted above, the principle of CBDR should guide offers and requests for international assistance and cooperation.[158] Developed States Parties therefore have a particular obligation to provide a variety of resources so that developing and least developed States Parties have the ability to choose steps towards the realisation of Covenant rights that realise ESCRs without significantly compromising the environment, thereby protecting ESCRs over the long-term.

The abovementioned factors and principles are by no means a comprehensive list of considerations. They do, however, serve as a point of departure for States Parties in ensuring that environmental considerations are appropriately balanced with other interests when choosing the most suitable measures for realising ESCRs in both the short term and long term. It is important to note that, for wealthy developed countries, it will be far more difficult to justify environmental harm that detrimentally impacts ESCRs, under the guise of the progressive realisation of ESCRs. Ultimately, States Parties must make these decisions on a case-by-case basis with due consideration for the specific needs and vulnerabilities of their population as well as the particular environmental conditions (and impacts) within the State Party, and globally. In doing so, States Parties must seek to progressively realise ESCRs as expeditiously and effectively as possible.

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[154] See Chapter 5, 5 6 2. See also UNGA *The "Just Transition" in the Economic Recovery: Eradicating Poverty within Planetary Boundaries* (2020) A/75/181/Rev1 para 39-42.
[155] See Chapter 5, 5 4 1.
[156] In relation to the minimum core, see Chapter 6, 6 2 and 7 4 2 above. In relation to retrogression, see Chapter 6, 6 4 and 7 4 4 above.
[157] On international assistance and cooperation, see Chapter 5, 5 3 1 and 7 4 5 above.
[158] See 7 4 5 and 7 3 7 above. See also Chapter 4, 4 3 4.

7 6 Conclusion

The state of the environment is a critical determinant of ESCRs and States Parties' ability to meet their obligations under article 2(1) of the Covenant. A degraded environment places ESCRs, and indeed human survival, at risk. Any effective implementation of the Covenant therefore requires the integration of environmental considerations into States Parties' obligations under article 2(1). Appropriately greening article 2(1) requires adherence to the rules applicable to the interpretation of human rights treaties. As demonstrated in section 2 above, a teleological interpretation of the Covenant that is effective and appropriately adapts to changing circumstances is one that actively integrates the environment. The interpretive rules explored in Chapter 3 affirm that the integration of environmental considerations within States Parties' obligations under article 2(1) is essential for the realisation of ESCRs.[159]

The greening of States Parties' obligations in this dissertation draws on the principles of IEL. These principles guide the interpretation of the Covenant and assist in identifying how States Parties' measures to realise ESCRs can promote environmental protection as well as protect ESCRs from harm caused by environmental degradation and climate change. As outlined above, the principles of environmental law have directed the interpretation of maximum available resources, core obligations, progressive realisation, and non-retrogression in this dissertation thereby facilitating the identification of States Parties' obligations related to the environment.[160]

This chapter synthesises the most important States Parties' obligations under article 2(1) that relate to the environment and have been identified and examined in Chapters 5 and 6.[161] These obligations are vital for protecting ESCRs from the threats of environmental degradation and climate change. It is therefore recommended that these obligations be included in the Committee's interpretation of States Parties' obligations under article 2(1) of the Covenant. The obligations identified in this dissertation do not purport to be a comprehensive list of all States Parties' obligations that relate to the environment. It is important that the Committee continue to evolve and adapt its interpretation of article 2(1) according to changing circumstances as well as in light of new scientific discoveries and developments. However, these obligations provide an important baseline for the integration of environmental considerations within States Parties' obligations under article 2(1). The inclusion of these and other environment-related obligations is critical in order to ensure the

[159] See section 7 2 above.
[160] See section 7 3 above.
[161] Section 7 4 above.

continued effectiveness and relevance of the Covenant in guaranteeing ESCRs for all in the face of growing environmental challenges.

Finally, the chapter reiterates factors and principles that should guide States Parties' decision-making in relation to appropriate measures for the realisation of ESCRs, as identified in Chapters 5 and 6. These are important considerations for States Parties that are compelled to consider environmental harm in the interests of progressively realising ESCRs, and will only be relevant where the maximum of available resources have been used and alternatives do not exist.

CHAPTER 8: CONCLUSION

8 1 Introduction

Economic, social and cultural rights are increasingly threatened by environmental challenges that are largely driven by human activity. In particular, climate change poses an existential threat to human life and the ability of States Parties to guarantee ESCRs.[1] In order to continue to safeguard the rights under the Covenant, it is imperative that environmental considerations are systematically and comprehensively integrated within the Covenant. This project of greening the Covenant must be done in accordance with the rules of interpretation applicable to human rights treaties. This dissertation has shown that a teleological interpretation of the Covenant with an evolutive approach supports, and indeed requires, the integration of environmental considerations.

As demonstrated in this dissertation, the principles of IEL provide guidance for this interpretation of the Covenant by highlighting how relevant environmental challenges have been regulated in IEL and through promoting the harmonisation of human rights law and IEL.[2] Their nature as legal principles means that these principles of IEL are sufficiently flexible for context-specific application by States Parties both under IEL and, where consistent with the rules of interpretation, within the scope of the Covenant.[3]

Focusing on the interpretation of States Parties' obligations under article 2(1) of the Covenant in this dissertation has allowed for an interpretation of key aspects of the Covenant that have significant implications for the realisation of all ESCRs. In light of the fact that article 2 has "a dynamic relationship with all of the other provisions of the Covenant", the whole of the Covenant can thus be infused with environmental considerations through the greening of article 2(1).[4] This ensures that environmental considerations are actively integrated within all States Parties' measures towards realising ESCRs, thereby safeguarding both the environment on which these ESCRs depend as well as the continued ability of States Parties to realise ESCRs in the face of environmental degradation and climate change.

Chapter 7 has provided a synthesis of the findings from Chapters 3 to 6 of the dissertation. Without duplicating the contents of Chapter 7, this chapter concludes by reviewing how this dissertation has addressed the research problem and supplementary research aims as

[1] See Chapter 2.
[2] See Chapter 4.
[3] The nature of principles of IEL is examined at Chapter 4, 4 2.
[4] CESCR *General Comment No 3* para 1.

identified in Chapter 1. Following this, the chapter highlights the most significant contributions made by this research for a proposed interpretation of States Parties' obligations that integrates environmental considerations. Finally, a number of important areas for future research will be outlined.

8 2 Reviewing the research problem and supplementary aims

The primary research problem identified in Chapter 1 posed the question of how the Covenant should be interpreted in order to systematically integrate environmental considerations. This dissertation has answered that question with reference to the rules of interpretation, principles of IEL, and States Parties' obligations under article 2(1).

The rules of interpretation examined in Chapter 2 prescribe how human rights treaties, and the Covenant in particular, should be interpreted. As has been argued, a teleological interpretation of the Covenant requires the appropriate integration of environmental considerations in order to ensure that the object and purpose of the Covenant can be realised.[5] In particular, the principle of effectiveness underscores the fact that the Covenant cannot be effective and practical in ensuring ESCRs if the environment is not considered.[6] Similarly, an evolutive approach to the interpretation of the Covenant emphasises that the Covenant is a living instrument that must evolve appropriately in light of present-day circumstances, which are characterised by widespread environmental upheaval and related threats to ESCRs.[7]

A supplementary aim of this dissertation was to identify relevant and recognised principles of IEL to guide the process of greening the Covenant through interpretation. Chapter 4 examined a selection of principles of IEL for this purpose. These principles were applied in Chapters 5 and 6 in the context of interpreting key elements of article 2(1) of the Covenant. The contribution of each of these principles to an integrated environmental interpretation of article 2(1) is summarised in Chapter 7.[8] This dissertation demonstrates that the principles of IEL have relevance for States Parties' obligations under the Covenant and can contribute to a systematic integration of environmental considerations. This is confirmed by the Committee's express recognition and reliance on certain principles of IEL.[9] The proposed

[5] See Chapter 3, 3 3 2 3 and 3 3 3 2 in relation to teleological interpretation. See also Chapter 7, 7 2.
[6] See Chapter 3, 3 3 3 2 1 on the principle of effectiveness.
[7] The evolutive approach to interpretation is examined at Chapter 3, 3 3 3 2 2. On human rights treaties as living instruments see for example, *Mapiripán Massacre vs Colombia* Series C No 122 (2005) IACtHR para 106; *Tyrer v United Kingdom* Application Number 5856/72 (1978) ECtHR para 31 & *Judge v Canada* Communication No 829/1998, CCPR/C/78/D/829/1998 (2003) HRC para 10.3.
[8] See Chapter 7, 7 2 where the interpretive support for greening States Parties' obligations is presented.
[9] See, for example, Chapter 7, 7 3 3 and 7 3 5 on the Committee's explicit reference to the no-harm principle and the precautionary principle.

interpretation of article 2(1) illustrates that a systematic and active process of integrating environmental principles within the scope of States Parties' obligations strengthens the Covenant's responsiveness to environmental challenges and promotes the effective realisation of ESCRs.

Another aim of this dissertation was to investigate how States Parties' obligations can be interpreted so as to integrate environmental considerations within the Covenant in accordance with the rules of interpretation. As noted above, the rules of interpretation are examined in Chapter 2. This dissertation has interpreted key elements of article 2(1) in accordance with this methodology. As demonstrated by Chapters 5 to 7, combining the rules of interpretation with the selected principles of IEL allows for a more systematic approach to the integration of environmental considerations. The relevance of the principles of IEL for the interpretation of article 2(1) has been tested against the interpretive methodology outlined in Chapter 2. As noted above, the emphasis on key elements of article 2(1) also supports a systematic approach to greening the Covenant, ensuring that all ESCRs are implemented with reference to relevant environmental considerations. The most significant contributions of the proposed interpretation are discussed further below.

The final aim of this dissertation was to identify relevant environment-related obligations that should be imposed on States Parties in order to protect the environment on which ESCRs depend and to ensure States Parties' continued ability to realise Covenant rights. Various environment-related obligations are identified in Chapters 5 and 6, and the most significant of these are synthesised in Chapter 7.[10] As this dissertation demonstrates, these obligations are critical to guaranteeing the enjoyment of ESCRs. The overarching obligation on States Parties is to take the environment into account wherever it is relevant for the enjoyment of ESCRs.

8 3 Significance of the dissertation

This section highlights a selection of important contributions made by this dissertation to the interpretation of article 2(1). These relate to the guidance of the principles of IEL, the qualitative approach to resources, the concept of minimum environmental conditions, and the interpretation of "full realization" under article 2(1) in light of relevant environmental constraints. These are detailed below.

This dissertation has indicated how the principles of IEL can be drawn on to guide the greening of the Covenant. These principles are detailed in Chapter 4 and applied to article

[10] See Chapter 7, 7 4.

2(1) in Chapters 5 and 6. The dissertation demonstrates how the Committee can use these principles to contribute to a systematic integration of environmental considerations within the interpretation of States' Parties obligations under article 2(1). As noted above, principles are inherently flexible and therefore particularly useful in relation to the diverse context-specific problems faced by States Parties to the Covenant.[11] Reliance on these principles also promotes harmonisation in international law, bridging the gap between IEL and international human rights law. The quality and effectiveness of the Committee's recommendations in relation to ESCRs and the environment would be significantly strengthened by building synergies between the Committee's existing doctrine and the principles of IEL.

The obligation on States Parties to use the maximum of available resources is examined in detail in Chapter 5. The second contribution to highlight here concerns the greening of this concept through a qualitative approach to resources.[12] The Committee has placed a substantial emphasis on the use of financial resources for the realisation of ESCRs, and rightly so.[13] However, a number of other resource categories are relevant, and often essential, for the implementation of the Covenant. These include legislative, administrative, educational, cultural, scientific and human resources.[14] In response to this narrow approach that focuses almost exclusively on financial resources and their availability,[15] Skogly proposed a qualitative approach to resources that considers the variety of resource types available to States Parties as well as the related means of implementation.[16] Skogly's qualitative approach involves considering the relevance of non-financial resources, as well as the quality and effectiveness of these resources in realising ESCRs.[17] This dissertation builds on this qualitative approach to emphasise the inherent value of natural resources.

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[11] See Chapter 4, 4 2 and 4 4.
[12] See Chapter 5, 5 3 1, 5 3 2 2 & 5 6 1 above in relation to a qualitative view of resources.
[13] R Uprimny, SC Hernández & AC Araújo "Bridging the Gap: The Evolving Doctrine on ESCR and 'Maximum Available Resources'" in K Young (ed) *The Future of Economic and Social Rights* (2019) 624 629 & 639; S Skogly "The Requirement of Using the Maximum of Available Resources for Human Rights Realisation: A Question of Quality as Well as Quantity" (2012) 12 *Human Rights Law Review* 393 400-401 & 404.
[14] See Chapter 5, 5 3 1. See also RE Robertson "Measuring State Compliance with the Obligation to Devote the Maximum Available Resources to Realizing Economic, Social, and Cultural Rights" (1994) 16 *Human Rights Quarterly* 693 695-697; Skogly (2012) *Human Rights Law Review* 404-413. With respect to the Committee's reference to non-financial resources see, for example, CESCR *General Comment No 3* para 7; CESCR *General Comment No 18: The Right to Work (Art 6 of the Covenant)* (6 February 2006) E/C12/GC/18 para 22; *General Comment No 21: Right of Everyone to Take Part in Cultural Life (Art 15, Para 1(a) of the Covenant)* (21 December 2009) E/C12/GC/21 para 48; CESCR *General Comment No 23: The Right to Just and Favourable Conditions of Work (Article 7 of the Covenant)* (7 April 2016) E/C12/GC/23 para 50; CESCR *General Comment No 24: State Obligations under the International Covenant on Economic, Social and Cultural Rights in the Context of Business Activities* (10 August 2017) E/C12/GC/24 para 14.
[15] Skogly (2012) *Human Rights Law Review* 402.
[16] 393-420.
[17] 405.

Natural resources, and the state of the environment generally, are vital underlying determinants of ESCRs. This dissertation therefore highlights that the inherent quality of the environment and natural resources is an available resource that States Parties must take advantage of, or "maximise".[18] These resources must be considered in light of their inherent qualities and contributions to the enjoyment of ESCRs, outside of their commodification or any revenue that might be gained from their exploitation. In taking measures to realise ESCRs, States Parties must therefore take into account any potential impacts on natural resources and the environment that might have a detrimental impact on the ability of these resources to support the realisation of Covenant rights.[19] This approach also requires protecting the inherent quality of the environment that supports ESCRs, and devoting resources to necessary environmental protection. This dissertation demonstrates that the appropriate application of principles of IEL provides significant guidance in relation to such environmental protection.

The application of Skogly's qualitative approach to the environment and natural resources provides a new approach to the contribution of these resources for the realisation of ESCRs. If properly applied by the Committee and States Parties, this qualitative approach would ensure that the value of the environment and natural resources in the realisation of ESCRs is actively considered rather than being disregarded or obscured by the overwhelming focus on financial resources.

The third significant contribution that will be highlighted here is the recognition of the environmental dimensions of core obligations.[20] This dissertation proposes that States Parties determine the minimum environmental conditions that are a necessary prerequisite for meeting their core obligations. Once identified, this provides a framework for prioritising environmental protection and preventative measures. These baseline environmental conditions, and related obligations, should be protected with the priority and urgency afforded to core obligations.

Finally, the obligation of progressive realisation demands the consistent advancement of ESCRs up to the point of "full realization".[21] This dissertation has argued for an interpretation of this end goal of progressive realisation in light of relevant environmental limits.[22] An understanding of these environmental limits is crucial for defining the scope of full realisation

[18] See Chapter 5, 5 5 2 on maximising the inherent value of the environment and natural resources.
[19] See Chapter 5, 5 4 2 4 with regard to the conduct of impact assessments.
[20] See Chapter 6, 6 2 2 on the proposed minimum baseline environmental conditions.
[21] ICESCR, article 2(1).
[22] Chapter 6, 6 3 4 on interpreting full realisation according to relevant environmental limits.

under the Covenant and therefore for defining the scope of States Parties' obligations. The Covenant cannot guarantee a level of attainment beyond what the boundaries of our environment will allow.

Borrowing from Raworth's image of a doughnut with "the safe and just space for humanity" located between the social foundation and the ecological ceiling,[23] the dissertation proposes that the environmental dimension of core obligations be considered the ecological floor of ESCRs, and that the full realisation of ESCRs be defined according to the planet's ecological ceiling. The progressive realisation of ESCRs therefore requires States Parties to move progressively from the baseline of core obligations towards the full realisation of ESCRs as defined by planetary boundaries and relevant environmental limits. The recognition of the ecological floor of ESCRs requires States Parties to prioritise all measures necessary to secure these minimum environmental conditions with the utmost urgency. Similarly, the recognition that the full realisation of ESCRs is defined according to an ecological ceiling requires States Parties to protect the environment wherever possible in order to prevent any adjustment or lowering of this ceiling of full realisation as a result of environmental degradation. Ensuring that everyone is able to enjoy ESCRs within this safe and just space for humanity will also require prioritising the needs of the most marginalised and disadvantaged, often necessitating the redistribution of resources from those who have a surplus.

The abovementioned contributions of this dissertation are wholly consistent with a teleological interpretation of the Covenant that responds to present-day conditions and is effective in the practical realisation ESCRs for individual rights-holders. Greening article 2(1) as proposed here will allow for the systematic integration of environmental considerations within the Covenant, thereby contributing to the protection of the environment for the sake of the enjoyment of ESCRs and ensuring that ESCRs can continue to be realised for present and future generations.

8 4 Possibilities for future research

As recognised in Chapter 1, the scope of this dissertation has been limited to specific considerations regarding greening key concepts of article 2(1) of the Covenant through interpretation.[24] Through the course of this research, however, a number of possibilities for future research have been identified. These are outlined below.

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[23] Raworth *Doughnut Economics* 44-45.
[24] The scope of this dissertation is outlined at Chapter 1, 1 4.

The notion of an environmental baseline or minimum environmental conditions as devised above requires additional investigation.[25] In particular, the establishment of such an ecological floor requires significant interdisciplinary research in order to determine the scope and content of the minimum environmental conditions that would be necessary to secure States Parties' ability to meet their core obligations. This may need to be done on a national, regional and international level so as to account for various context-specific needs and environments while also incorporating global environmental conditions. The notion of an environmental baseline for the core of ESCRs is only useful if the necessary work is done to identify its content and scope in various contexts. Of course, any recognition of the environmental dimensions of core obligations also requires research and clarification on the scope and content of core obligations themselves. Similarly, interpreting the ceiling of the full realisation of ESCRs in accordance with environmental constraints requires interdisciplinary research to determine the relevant boundaries and thresholds of the environment, and to then apply those limits to the scope and content of the ESCRs guaranteed under the Covenant.[26]

The integration of environmental considerations within individual ESCRs was not within the scope of this dissertation. However, this remains an important area for future research. The environmental dimensions of States Parties' obligations under individual Covenant rights need to be investigated and defined. The principles of IEL relied on in this dissertation could provide guidance on the interpretation of ESCRs. In particular, the interpretation of article 11(1) should be examined in light of the environmental limits to ESCRs recognised in this dissertation, especially given the right to "the continuous improvement of living conditions". An appropriate interpretation of article 11 may require an investigation of how this right could be justifiably limited under article 4 in order to guarantee all ESCRs without exceeding planetary boundaries.

In addition to investigating specific ESCRs and environmental considerations, further research is necessary in relation to monitoring the environmental dimensions of ESCRs. It may be necessary to establish specific indicators, targets and benchmarks. Existing instruments such as the Sustainable Development Goals may be useful in this regard.[27]

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[25] See 8 3 above as well as Chapter 6, 6 2 2.
[26] See 8 3 above and Chapter 6, 6 3 4 on the interpretation of "full realization" in article 2(1).
[27] See, for example, C Golay "ESCR and SDGs: Practical Manual on the Role of United Nations Human Rights Mechanisms in Monitoring the Sustainable Development Goals that Seek to Realize Economic, Social and Cultural Rights" (June 2020) *The Geneva Academy of International Humanitarian Law and Human Rights* <https://www.geneva-academy.ch/joomlatools-files/docman-files/ESCR%20and%20SDGs%20-%20Geneva%20Academy%20Website%20-%2029.6.2020%20(interactive).pdf> (accessed 06-11-2020).

As noted in Chapter 6, the Committee makes reference to the notion of "sustainability" in a variety of contexts, often unrelated to the environment.[28] It is therefore necessary to establish a definition of sustainability in the context of the Covenant. This would promote clarity and consistency in the work of the Committee, thereby providing clearer guidance for States Parties on the nature and scope of their obligations under the Covenant. Establishing a definition of sustainability that includes environmental concerns would further promote the greening of the Covenant.

Although the integration of environmental considerations within article 2(1) has implications for the Covenant as a whole, there are a number of groups that require particular attention. Certain groups and categories of individuals are at a much greater risk of harm in relation to environmental degradation, and climate change in particular. It is therefore important to conduct dedicated research on the position of, for example, indigenous peoples, women, children, the poor, peasants and other people working in rural areas as well as those in vulnerable geographical locations, including small island developing states and, more broadly, climate refugees. Such research should investigate the extent of current and potential future impacts on the ESCRs of these groups as well as the scope of States Parties' obligations in this regard.

This dissertation has identified a number of extraterritorial obligations of States Parties as well as obligations of international assistance and cooperation.[29] Further research is required to examine the precise extent of States Parties' extraterritorial obligations under the Covenant, particularly as they relate to climate change and environmental harm. In addition, the nature and scope of international cooperation and assistance must be investigated in the context of the global nature of many environmental challenges, and climate change in particular. Clear obligations regarding international assistance and cooperation for climate change mitigation and adaptation need to be determined. In addition, a framework or set of guiding principles is needed for the allocation of responsibility for climate change and extraterritorial environmental harm, as well as for the prioritisation of assistance for states where such harm has occurred. This once again requires interdisciplinary research that investigates the degrees of responsibility for global or extraterritorial environmental harm of States Parties as well as relative degrees of impact on human rights that demand assistance.

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[28] See Chapter 6, 6 3 2 and 6 3 3 1 in relation to the Committee's use of the term "sustainability".
[29] In relation to environment-related obligations of international assistance and cooperation, see Chapter 7, 7 4 5.

The position of future generations has been considered in Chapter 6. Further research is required in order to determine the nature of the rights of future generations under the Covenant as well as the scope of related States Parties' obligations. In addition to this, research is required in order to determine how best to resolve conflicts between the rights of present and future generations.[30]

More broadly, further research is also necessary with regard to the relationship between the Covenant and IEL. As demonstrated by the reliance on principles of IEL in this dissertation, there are numerous opportunities for harmonisation and synergies between environmental law and human rights law, and the Covenant in particular.[31] For example, additional principles and mechanisms of IEL not addressed here may be significant sources of guidance for the implementation of the Covenant or the interpretation of ESCRs.[32] Similarly, in the context of the United Nations it is recommended that possibilities for collaboration between the Committee and the UN Environment Programme be investigated in order to promote harmonisation and coordination between ESCRs and IEL.[33]

8 5 Concluding remarks

As this dissertation has demonstrated, effective realisation of ESCRs under the Covenant requires States Parties' obligations to be interpreted so as to integrate relevant environmental considerations. States Parties cannot comply with their Covenant obligations without taking into account the numerous threats to ESCRs posed by, for example, biodiversity loss, air and water pollution, deforestation, land degradation, ocean acidification, and extreme weather events including droughts, heat waves and floods.[34] These threats have a disproportionately negative impact on the rights of those who are already marginalised and disadvantaged.

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[30] Some preliminary recommendations are made in this regard in Chapter 6, 6 3 3 2 3.

[31] On the relationship between the Covenant and IEL, see S Chuffart & JE Viñuales "From the Other Shore: Economic, Social, and Cultural Rights from an International Environmental Law Perspective" in Riedel E, G Giacca & C Golay (eds) *Economic, Social and Cultural Rights in International Law: Contemporary Issues and Challenges* (2014) 286 286-307.

[32] See, for example, the work of Elisa Morgera in relation to human rights and the principle of fair and equitable benefit-sharing. See E Morgera "Under the radar: the role of fair and equitable benefit-sharing in protecting and realising human rights connected to natural resources" (2019) 23 *The International Journal of Human Rights* 1098 1098-1139; E Morgera "Fair and Equitable Benefit-sharing" in L Krämer & E Orlando (eds) *Principles of Environmental Law* (2018) 323 323-337.

[33] See, for example, the memorandum of understanding concluded between UNEP and the OHCHR in 2019 in relation to such collaborative work. See UNEP & OHCHR "Memorandum of Understanding Concerning Cooperation between the United Nations Environment Programme (UNEP) and the United Nations Office of the High Commissioner for Human Rights (OHCHR)" *UN Environment Programme* (16 August 2019) <https://wedocs.unep.org/bitstream/handle/20.500.11822/29758/MoU_UNEP_OHCHR.pdf?sequence=1&isAllowed=y> (accessed 05-11-2020).

[34] See Chapter 2, 2 2 1.

Protecting ESCRs therefore requires environmental protection and the imposition of environment-related obligations on States Parties. The interpretation of States Parties' obligations proposed in this dissertation systematically integrates environmental considerations with reference to established principles of IEL. In this way the dissertation contributes to the critical project of greening the Covenant. Such a project is indispensable for ensuring that present and future generations are able to enjoy sustainable access to ESCRs by protecting the environment on which these rights depend.

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